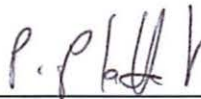


THE LEGACY OF SHAMANS? STRUCTURAL AND COGNITIVE PERSPECTIVES  
OF PREHISTORIC SYMBOLISM IN THE BERING STRAIT REGION

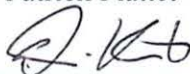
By

Feng Qu

RECOMMENDED:



Dr. Patrick Plattet



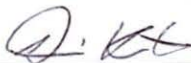
Dr. David Koester



Dr. Ben Potter, Advisory Committee Co-Chair

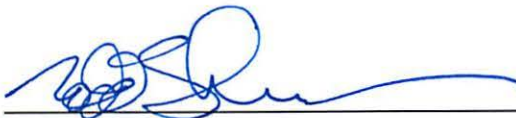


Dr. Peter Schweitzer, Advisory Committee Co-Chair

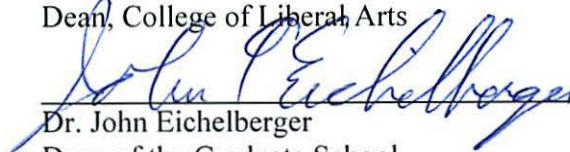


Dr. David Koester, Chair, Department of Anthropology

APPROVED:



Mr. Todd Sherman  
Dean, College of Liberal Arts



Dr. John Eichelberger  
Dean of the Graduate School



Date



THE LEGACY OF SHAMANS? STRUCTURAL AND COGNITIVE PERSPECTIVES OF  
PREHISTORIC SYMBOLISM IN THE BERING STRAIT REGION

A  
DISSERTATION

Presented to the Faculty  
of the University of Alaska Fairbanks

in Partial Fulfillment of the Requirements

for the Degree of  
DOCTOR OF PHILOSOPHY

By

Feng Qu, B.A., M.A.

Fairbanks, Alaska

August 2013





## **Abstract**

This research explores the meanings of prehistoric artistic artifacts discovered in the Bering Strait region. The research focuses on the prehistoric period between AD 100 and 1700, including Okvik culture, Old Bering Sea culture, Punuk Culture, Birnirk Culture, Thule culture, and Ipiutak Culture. My archaeological data in this research were collected from the archaeological collections of the Okvik site on Punuk Islands, the Kukulik site on St. Lawrence Island, and the Nukleet site at Cape Denbigh at the University of Alaska Museum of the North.

Based on abundant ethnographic records from the Bering Strait region, this research relies on ethnographic analysis as methodology to approach prehistoric symbolism. Applying ethnographic analysis results in diverse interpretations of the archaeological artifacts, which bear potential spiritual or secular meanings. Theoretically, the research provides an assessment of contemporary archaeological theories such as cognitive archaeology, structural archaeology, and shamanism theory (general shamanism theory and the neuropsychological model) in order to examine the reliability of these theories in the study of prehistoric art. Due to the problems of cognitive, structural, and shamanism theories, the conclusion of this research builds on practice theory and animist ontology to interpret the variants of art productivity, cosmological structures, and relationship between humans and materials.

## Table of Contents

	Page
Signature Page.....	i
Title Page.....	iii
Abstract.....	v
Table of Contents.....	vii
List of Figures.....	xi
List of Tables.....	xix
Acknowledgements.....	xx
 <b>Chapter 1: Introduction.....</b>	 <b>1</b>
Focus of Research and Empirical Problems.....	1
Contemporary Theories and Theoretical Problems.....	5
Cognitive Archaeology.....	5
Structural Archaeology.....	6
Shamanism Theory.....	7
Theoretical Problems.....	8

Methodology and Methods.....	11
Data Collection – Sampling.....	12
Data Collection – Evaluation.....	16
Data Analyses.....	17
Theoretical Analyses.....	18
Structure of the Dissertation Outline.....	19
<b>Chapter 2: Cognitive Archaeology, Structural Archaeology, and the Archaeology of Shamanism.....</b>	<b>23</b>
Cognitive Archaeology.....	24
Definition of Cognitive Archaeology and Its Brief History.....	25
Cognitive Perspectives on the Prehistoric Ritual and Cult.....	29
Prehistoric Art in Cognitive Studies.....	36
Symbolism and Structural Archaeology.....	41
Structures, Cultural Systems and Grammatical Practices.....	42
Structures, Practices, and Postprocessual Archaeology.....	54
Shamanism and the Archaeology of Shamanism.....	67
The Fundamental Characteristics of Shamanism.....	67
The Trend of General Shamanism Theory.....	79
The Archaeology of Shamanism.....	82
Summary.....	100

**Chapter 3: An Archaeological Review of Prehistoric Art in the Bering Strait**

<b>Region.....</b>	<b>103</b>
Okvik Culture.....	106
Old Bering Sea Culture.....	132
Punuk Culture.....	170
Birnirk Culture.....	190
Thule Culture.....	196
Ipiutak Culture.....	222
Summary.....	234

**Chapter 4: Art Symbolism and Practices in Ethnographic Records.....237**

Art Symbolism and Daily Life.....	240
Art Symbolism and Ceremonialism.....	255
Shamanic Practices and Religious Ideas.....	271
Summary.....	289

**Chapter 5: Ethnographic Perspectives of Archaeological Artifacts.....293**

Circle-Dot Motif.....	294
Animal Images.....	309
Human Figures.....	330
Summary.....	341

**Chapter 6: Structural and Cognitive Perspectives.....343**

Geographical and Temporal Variant of Artistic Productivity.....	343
---	-----

A Hypothesis: From Individual Ritual to Communal Ceremonialism.....	353
The Hunting Themes in Shamanism, the Neuropsychological Model and	
Animist Ontology.....	361
Boundaries and Structures.....	374
Summary.....	386
<b>Chapter 7: Summary and Conclusions.....</b>	<b>389</b>
Summary.....	389
Conclusions.....	394
<b>References.....</b>	<b>413</b>

## List of Figures

	Page
Figure 1. Map of the Bering Strait region.....	2
Figure 2. The division of Saami's household space and its principle oppositions.....	62
Figure 3. Six categories of entoptic phenomena compared with San and Coso rock-art depictions.....	90
Figure 4. Six categories entoptic phenomena compared with Upper Palaeolithic mobile and parietal art depictions.....	91
Figure 5. House 3 of Hillside site, St. Lawrence Island.....	109
Figure 6. Harpoon heads from Okvilk site .....	112
Figure 7: Whaling harpoon head from Okvik site .....	113
Figure 8. Decorative motifs of Okvik/OBS I culture.....	114
Figure 9: Ivory arrow straightener from Okvik site.....	115
Figure 10. Counterweights from Okvik site.....	116
Figure 11: Counterweight from Okvik site.....	117
Figure 12. Blubber scrapers from Okvik site.....	118
Figure 13. Ulu handles from Okvik site.....	119
Figure 14. Ivory artifacts from Okvik site.....	120

Figure 15. Unidentified ivory object from Okvik site.....	121
Figure 16. Ivory artifacts from Okvik site.....	121
Figure 17. Ivory artifacts from Okvik site.....	122
Figure 18. Antler Arrowhead from Okvik site.....	123
Figure 19: Ivory dolls from Okvik site.....	125
Figure 20: Ivory dolls from Okvik site.....	126
Figure 21: Ivory dolls from Okvik site.....	127
Figure 22: Ivory doll from Okvik site.....	128
Figure 23. Ivory dolls from Okvik site.....	129
Figure 24. Ivory animal figures from Okvik site and Hillside site.....	130
Figure 25. Plan and section of House 2 of the Hillside site at Gambell, St. Lawrence Island.....	133
Figure 26. Plan of Burial 234, Ekven Cemetery.....	135
Figure 27. Artifacts from Burial 234, Ekven Cemetery.....	136
Figure 28. Principal decorative motives of OBS II.....	137
Figure 29. Samples of decorative motives of OBS III.....	138
Figure 30. Ivory harpoon head from Kukulik site.....	138
Figure 31. Ivory harpoon head from Kukulik site.....	143
Figure 32. Ivory harpoon head from Kukulik site.....	144
Figure 33. Ivory harpoon head from Kukulik site.....	145

Figure 34. Type J ivory harpoon heads from Kukulik site.....	146
Figure 35. Ivory harpoon head from Kukulik site.....	147
Figure 36. Ivory harpoon head from Kukulik site.....	148
Figure 37. Ivory harpoon head from Kukulik site.....	148
Figure 38. Ivory harpoon heads from St. Lawrence Island.....	149
Figure 39. Ivory artifacts from St. Lawrence Island.....	150
Figure 40. Ivory harpoon foreshaft receiver from Kukulik site.....	151
Figure 41. Bronshtein's Type 1 counterweights, Okvik (OBS I) culture.....	158
Figure 42. Bronshtein's Type 2 counterweights, OBS II.....	159
Figure 43. Bronshtein's Type 3 and 4 counterweights, OBS III and Punuk .....	160
Figure 44. Ivory harpoon counterweight.....	161
Figure 45. Ivory harpoon counterweights from Kukulik site.....	162
Figure 46. Ivory harpoon counterweights from Kukulik site.....	163
Figure 47. Ivory birds from Kukulik site.....	164
Figure 48. Ivory polar bear from Hillside site at Gambell.....	164
Figure 49. Anthropomorphic and zoomorphic ivory objects from Ekven cemetery.....	165
Figure 50. Ivory pottery paddle.....	166
Figure 51. Anthropomorphic and zoomorphic ivory carvings.....	167
Figure 52. Ivory human heads from Kukulik site.....	168



Figure 53. Ivory human figure from Kukulik site.....	169
Figure 54. House G I near the Miyowagh site at Gambell.....	173
Figure 55. Ivory harpoon head, Type D (Punuk) from Kukulik site.....	174
Figure 56. Ivory harpoon head, Type D (Punuk) from Kukulik site.....	175
Figure 57. Ivory harpoon heads, Type E (Punuk) from Kukulik site.....	175
Figure 58. Ivory harpoon head, Type F (Punuk) from Kukulik site.....	176
Figure 59. Ivory harpoon heads of Punuk culture.....	177
Figure 60. Ivory Knife handle from Kukulik site.....	179
Figure 61. Ivory objects from Kukulik site.....	180
Figure 62. Ivory objects of Punuk culture from Kukulik site.....	181
Figure 63. Ivory objects of Punuk culture.....	182
Figure 64. Ivory harpoon counterweights of Punuk culture from St. Lawrence Island.....	184
Figure 65. Ivory figurines of Punuk Culture.....	186
Figure 66. Ivory bird figures of Punuk culture from Kukulik site.....	187
Figure 67. Ivory seal figures of Punuk culture.....	188
Figure 68. Ivory objects of Punuk culture in shape of whale tail.....	189
Figure 69. Ivory wrist guard of Punuk culture from Kukulik site.....	190
Figure 70. Antler harpoon heads of Birnirk Culture from Kukulik site.....	193
Figure 71. Pottery Paddle made of whale bone, from Birnirk site.....	194

Figure 72. Dolls of Birnirk culture.....	195
Figure 73. Plan of Thule House 7, Cape Krusenstern.....	198
Figure 74. Thule culture objects from Cape Krusenstern.....	199
Figure 75. Decorated elements from early Western Thule Houses 4, 5, and 6 at Cape Krusenstern.....	200
Figure 76. Decorative elements from late Western Thule House 25a at Cape Krusenstern.....	202
Figure 77. Decorated objects from late Western Thule House 27 at Cape Krusenstern.....	202
Figure 78. Ivory doll of Thule culture from Cape Krusenstern.....	203
Figure 79. Ivory harpoon heads of Thule culture from Kukulik site.....	204
Figure 80. Decorated ivory ornament of Thule culture from Kukulik site.....	205
Figure 81. Human figures of Thule culture from Kukulik site.....	206
Figure 82. Ivory animal figures of Thule culture from Kukulik site.....	207
Figure 83. Wooden animal figures of Thule culture from Kukulik site.....	208
Figure 84. Ivory fox figures of Late Thule culture from Kukulik site.....	209
Figure 85. Ivory and antler harpoon heads of Thule culture from Nukleet site.....	213
Figure 86. Ivory and wooden decorated objects from Nukleet site.....	214
Figure 87. Antler brow bands from Nukleet site.....	215
Figure 88. Brow bands from Nukleet site.....	216

Figure 89. Ivory cord attacher of Thule culture from Iyatayet site and Nukleet site.....	217
Figure 90. Bear head line attacher of ivory from Nukleet site.....	218
Figure 91. Ivory animal figures from Nukleet site.....	219
Figure 92. Wooden and bark dolls from Nukleet site.....	220
Figure 93. Combs and fork in human form from Nukleet site.....	221
Figure 94. Bark dish models from Nukleet site.....	222
Figure 95. Ivory harpoon heads from Ipiutak site.....	228
Figure 96. Antler arrowheads from Burial 102, Ipiutak site.....	229
Figure 97. Two engraved ivory plaques from Burial 61, Ipiutak site.....	230
Figure 98. Ivory lance head from House 70, Ipiutak site.....	230
Figure 99. Ivory walrus figure from Burial 42, Ipiutak site.....	231
Figure 100. Ivory objects of Ipiutak culture. ....	232
Figure 101. Ivory composite burial mask from Ipiutak site.....	233
Figure 102. Ivory snow knife of Inupiaq culture.....	243
Figure 103. Wooden bowls from Yup'ik culture.....	244
Figure 104. Eskimo Ivory handle and fastener.....	245
Figure 105. Siberian Yupik ivory smoking pipe.....	246
Figure 106. Eskimo ivory cord attacher and hook.....	248

Figure 107. Kayak stanchions.....	249
Figure 108. Harpoon head and shaft of ivory.....	249
Figure 109. Yup'ik hunting hat.....	251
Figure 110. Eskimo girls' ivory story knives.....	254
Figure 111. Caribou mask from Old Hamilton.....	269
Figure 112. Owl Mask from Qissunaq, Chevak.....	270
Figure 113. Wooden Mask from the Lower Yukon.....	283
Figure 114. Wooden figures of flying shamans.....	285
Figure 115. Inupiaq Kikituk from Point Hope.....	286
Figure 116. Shaman's spiritual objects from Little Diomed Island.....	287
Figure 117. Siberian Yupik charm belt from St. Lawrence Island.....	289
Figure 118. Ivory container from Okvik site.....	295
Figure 119. Ivory ulu handle from Okvik site.....	295
Figure 120. Ivory ulu handle from Okvik site.....	296
Figure 121. Ivory sled runner from Okvik site.....	296
Figure 122. Wrist guard from Miyowagh site.....	299
Figure 123. Artifacts with circle-dot motif in Jacobsen's collection at The Ethnologisches Museum Berlin.....	299
Figure 124. Ivory decorative pieces of hunting hats from Hooper Bay.....	301
Figure 125. Bird beak and harpoon head.....	308

Figure 126. Ulu of OBS culture.....	312
Figure 127. Carvings of birds from Kukulik site.....	314
Figure 128. Harpoon socket pieces of OBS culture.....	316
Figure 129. Harpoon socket piece and barbed point from the Yukon River mouth.....	317
Figure 130. Whale-tail ornament of Punuk culture.....	318
Figure 131. Wood whale/human figure from Sledge Island.....	320
Figure 132. Ivory pottery paddle.....	323
Figure 133. Ivory whales of Punuk culture from Punuk site.....	325
Figure 134. Ivory carvings from Kukulik site.....	326
Figure 135. Wood animal figures from Kukulik site.....	329
Figure 136. Ivory human figure from Okvik site.....	334
Figure 137. Umiak model from Tigara Village in Point Hope.....	338
Figure 138. Ivory models of umiak and paddle.....	339
Figure 139. Decorated objects of early Thule from House 1 of Deering site.....	350
Figure 140. Ivory Darts from Kukulik site.....	377
Figure 141. Arrowhead and Harpoon Dart Heads from Nukleet site.....	379

## **List of Tables**

	Page
Table 1. Indigenous festivals in the Bering Strait region.....	265
Table 2. The evolutionary sequence of circle-dot motif in the Bering Strait region.....	302

## **Acknowledgements**

First and foremost, I would like to thank my committee members who provided me much guidance and wisdom throughout my doctoral studies. They are Peter Schweitzer, Ben Potter, David Koester, and Patrick Plattet. Many thanks especially go to my chief advisors, Peter Schweitzer and Ben Potter; their dedication to my research is greatly appreciated. I am grateful to the following generous scholars for their development of my ideas and suggestions: William Fitzhugh, Owen Mason, Ann Fienup-Riordan, Robert Wallis, and Mikhail Bronstein.

I would like to thank University of Alaska Museum of the North (UAMN) for access to the archaeological and ethnographic collections, permission to photo artifacts and read files and other help. Many individuals such as James Whitney, Angela Linn, Scott Shirar, Sam Coffman, and others, provided me various kinds of support.

Thanks also to the following UAF faculty and my fellow doctoral students for their emotional support and their friendship: David Fazzino, Amber Lincoln, Tobias Holzlehner, Sveta Yamin-Pasternak, Josef Glowka, Helga Wagenleiter, Nicole Dufour, Stacey Fritz, Tayana Arakcha, Shiaki Kondo, Ilona Kemp Noordeloos, and Stefan Krist.

Many administrative staff at UAF provided me with help of various kinds during my graduate study. I would like to thank the following individuals: Daniel Julius, Morgan Dufseth, Lawrence Duffy, Laura Bender, Juan Goula, Shelly Baumann, Hope Bickmeier, Donna Anger, Carol Holz, and Sue Wolfe. They certainly deserve credit for anything I have achieved here and elsewhere.

I want to acknowledge the following departments and organizations for financial support. The College of Liberal Arts awarded me Teaching Assistantship for over 4 academic years. Other funding came from the Graduate School, the Archaeological Field School at the Department of Anthropology, the Provost's Office, the Facilities Service, University of Alaska Vice President Office, and the Leona Lowrey Memorial Scholarship.

xx

Last but not least, I am indebted to my wife Xiaoli Pan and my son Shuoming Qu. I am sure that this dissertation would not have been possible without the love and patience of my family.



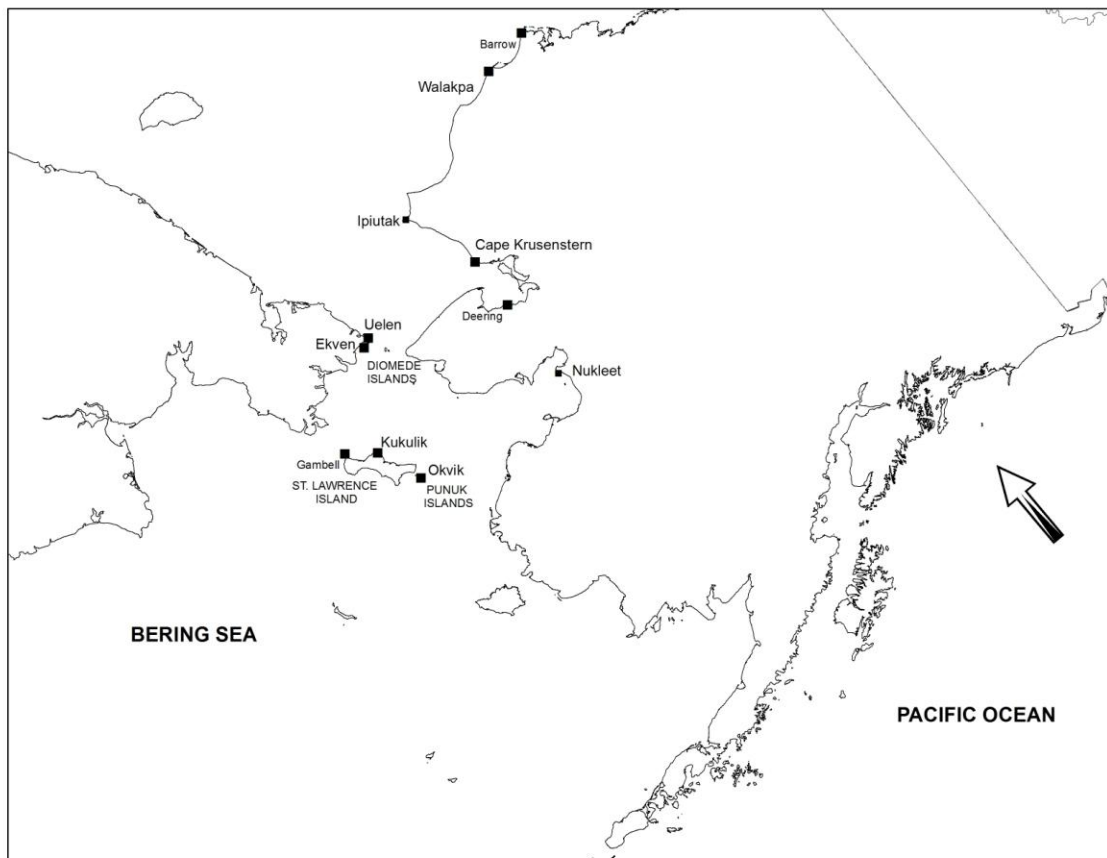
## **Chapter 1: Introduction**

### **Focus of Research and Empirical Problems**

One of the striking cultural characteristics of the Northern Maritime cultures in the Bering Strait region is the strong artistic tradition which is represented by incised and sculptural art. In Owen Mason's words, "nearly every bone or ivory artifact was crafted with decorative engraving bearing animal and human representations, or transformational images of both" (2009a: 112). Though some bone or ivory tools were actually undecorated, it is apparent that a large number of artifacts produced from the Northern Maritime cultures are carved with human or animal images or decorated with representational or geometric forms. The radical occurrence of this artistic tradition, and the meanings that the dazzling artworks carried, have remained an enigma in the archaeology of prehistoric Eskimo in the Western Arctic. Why did the ancient humans invest considerable energy for the production of these objects? What purpose did they serve? Did they fulfill aesthetic needs, or did they function in hunting magic? Were they produced by shamans or other religious practitioners? Other questions include: how important was the art in communal life, and how humans used these products in their daily life, what was the relationship between human and art, and what the relationship between art and other cultural materials? Although many scholars have contributed to the discussion on the spiritual meanings of the carved or engraved artifacts among Northern Maritime cultures (e.g., Arutiunov & Fitzhugh 1988; Arutiunov & Sergeev 2006[1969], 2006 [1975]; Dikov 1979; Fitzhugh 2009a; Krutak 2009; Mason 1998, 2009a, 2009b; Morrow & Volkman 1975), these questions are far from solved.

The definition of the Bering Strait region here includes the northwestern and southwestern coasts of Alaska, the coastal regions of Chukchi Peninsula, and the islands between the two sides of the Bering Strait (Figure 1). This research will focus on the prehistoric period between AD 100 and 1700, including Okvik culture, Old Bering Sea

(OBS) culture, Punuk Culture, Birnirk Culture, and Thule culture. Specifically, my regional focus is on the St. Lawrence Island, the Punuk Islands, and the adjacent Alaskan Bering Sea coast which witnessed the archaeological cultural sequence starting with Okvik culture and continuing through OBS culture, Punuk culture, and Thule culture until the historical period.



**Figure 1. Map of the Bering Strait region**

The purpose of this dissertation is to examine the meanings of prehistoric art symbolism in the Bering Strait region. Archaeological discoveries have demonstrated that the people who inhabited the prehistoric Bering Strait region were outstanding ivory carvers like their historical descendants living in the same area. Many harpoon parts such

as harpoon heads, counterweights, harpoon rests, and socket pieces were decorated with various geometric designs. Various anthropomorphic or zoomorphic figures were represented by freestanding sculptures, as well as a large number of ivory or bone implements (Fitzhugh 2009a; Fitzhugh & Crowell 2009; Mason 2009a, 2009b).

The regional and temporal variations of art styles and forms are evident in the Bering Strait region. Several empirical problems have thus emerged in the study of prehistoric Eskimo art symbolism. These problems are central in my research in this dissertation.

**Problem 1:** In terms of archaeological data, some scholars have concluded that the Thule phase dropped off from the prehistoric Eskimo art tradition (Ackerman 1984; Collins 1973; Ford 1959; Mason 2009b; Stanford 1976). The earliest systematic excavation of Birnirk-Thule culture in Alaska was conducted by James Ford in the vicinity of Point Barrow in 1935 and 1952 (Ford 1959). The following systematic excavation of a Birnirk-Thule culture site was led by Dennis Stanford at the Walakpa during 1968 and 1969 (Stanford 1976). These excavations show that both Birnirk and Thule assemblages have rare decorated ivory and bone artifacts. Antler was much more often used in making various implements and tools. In contrast to Okvik, OBS, and Punuk cultures, Birnirk and Thule cultures in the Point Barrow area also had scarce sculptural artworks (Ford 1959; Stanford 1976). However, Thule culture actually had numerous regional variations (Dumond 1977). The problem is whether the decline of Thule art represented a regional phenomenon only in the vicinity of Point Barrow or occurring in all related areas during Thule phase.

A further question concerns what caused this artistic phenomenon if the art decline occurred during the Thule period. Mason (2009b) has proposed a climate deterministic model, in which he hypothesizes that the art scarcity of Thule culture was determined by the climate change represented by the Little Ice Age. The stormier conditions intensified the upwelling of nutrients which attracted sea mammals. Because of hunting success, humans did not need rituals. My concern is whether this argument is strong enough to support the Thule art decline phenomenon. If yes, were art variations in

the Bering Strait prehistory always determined by climate change? If not, what elements constituted the ultimate agents that were responsible for the changes of art styles and forms throughout the past 2,000 years?

**Problem 2:** Many scholars are inclined to exclude Ipiutak culture in the Northern Maritime sequence and maintain that Ipiutak culture was more likely developed from the Arctic Small Tool tradition (ASTt, 2500 – 800 BC) and the Norton Tradition (500 BC – AD 100) because it has more cultural similarities with the Norton Tradition in economic style and material culture (Collins 1973; Dumond 1977; McGhee 1976; Rainey 1941b, 1971). The problem with this statement is that it is difficult to explain why ASTt and Norton antecedents had few artworks but Ipiutak descendants became outstanding artisans of ivory and bone. Ipiutak culture was contemporary to OBS culture, situated east of at coastal and interior areas in northwestern Alaska. Ipiutak culture adapted a seasonally sedentary type. The Ipiutak people were hunters of caribou during the winter in the interior regions but moved to the coast to hunt sea mammals in the summer, like their Norton predecessors. However, Ipiutak culture indeed borrowed many geometric decorative motifs such as circle-dots, rosettes, straight and barbed spurred circles and lines, and circles or ovals, from its southern neighbor – the Okvik and OBS cultures (Larsen and Rainey 1948). Mason accordingly suggests that Ipiutak culture might be preceded by the Okvik culture and that Ipiutak societies had a tight relation with OBS societies (Mason 1998, 2009b). The problem with Mason's statement is that the cultural differences between Ipiutak and OBS are apparent. The Ipiutak culture lacks evidences of counterweight, ulu knife, pottery. Many special ivory carvings such as open work objects, chains, swivels, composite burial masks, and decorated plaques demonstrate its particular characteristics distinguished from Okvik and OBS art tradition (Larsen & Rainey 1948).

**Problem 3:** The mask-like images, which were used to decorate ivory implements and working tools during the Okvik and OBS periods, dramatically disappeared during the Punuk and Thule periods. This phenomenon has constituted an archaeological problem in the Bering Strait region. The mask-like therianthrope being was one of major motifs decorated on Okvik and OBS ivory objects such as counterweights and

harpoon heads. These mask-like faces were usually composed of the eyes (represented by paired concentric circles or ovals), the mouth, and the nostrils. However, such imagery completely disappeared from the ivory implements during Punuk and Thule periods. Although the paired circles were still used by Punuk and Thule peoples to perhaps symbolize a therianthrope face, such reduced and simplified motifs might lose the spiritual power and might only represent “recollections of the inspirations that produced the great art of their predecessors” (Wardwell 1986: 22). This dramatic stylistic change remains an enigma in prehistoric Eskimo symbolism. Was it a purely iconological phenomenon or associated with social changes? If it was created by social changes, what were the factors which directly contributed to such drastic symbolic shift?

### **Contemporary Theories and Theoretical Problems**

Early processual archaeologists of the 1960s and 1970s claim that it is difficult to find methodology to build a connection between human ideology and material remains (e.g., Binford 1965), but both cognitive and structural archaeologists believe that the human mind and cognition can be studied through investigating symbols and religious remains (see Bertemes & Biehl 2001). Ancient art is thus considered to be as rich a source of cognitive information as ancient writing systems because prehistoric art “serves as a window into all components of the sociocultural system: technological, social, and ideological” (Boyd 1996: 152). Since the 1960s, shamanic approaches have constituted the other trend in studies of prehistoric art. The neuropsychological model has caused a hot debate in the archaeology of shamanism especially in the last three decades. This dissertation provides a general review of these theoretical approaches. However, my purpose in this dissertation is not to simply draw on these theories to interpret the prehistoric Eskimo symbolism in the Bering Strait region. Rather, relying on ethnographic analysis, I will further discuss the reliability of these theories in the studies of prehistoric art.

### **Cognitive Archaeology**

Cognitive archaeology focuses on past ways of thought through studies of material culture (Renfrew, 1994: 3). Generally, the approaches of cognitive archaeology can be broken down into two broad categories. The first refers to the evolution of our pre-sapien ancestors' cognitive abilities to process information. The second involves representation of thought – such as cosmology, ideology and religion – in earlier modern man's societies (Flannery & Marcus 1993: 36-37; Mithen 1998: 9). April Nowell (2001) emphasizes that the second category refers to the investigations of the material cultures from the Neolithic period onwards. She also highlights the importance of data in historical records and ethnographical materials in studying prehistoric religion, cosmology, iconography and ideology (2001: 20). My research will be based on the latter category of cognitive theory, and will pay attention to representations of prehistoric Eskimo thought in the Bering Strait.

Many scholars have contributed to the relationship between cognitive science and religion (e.g., Anderson 2001; Boyer 2000, 2001, 2002; Donald 2009; McCauley & Lawson 2007; Mithen 2001, 2004; Tremlin 2006; Whitehouse 2000, 2002, 2004; Whitehouse & Martin 2004; Whitehouse & McCauley 2005). The pivotal issue in the study of cognitive religion is how to deal with the relationship between internal mind (thought) and external representations (artifacts). Many cognitive archaeologists seem to have come to a consensus on this and are inclined to think that external representations are the products of the internal human mind. As Tremlin (2006) has indicated, “religion is simply one outcome of faculties of thought common to all normal brains” (Tremlin 2006: 197).

Cognitive archaeologists are inclined to consider that artworks are transmitters of information. Prehistoric art represented the outcome of information processing in the human mind (Mithen 2001, 2004; Renfrew 1994).

### **Structural Archaeology**

Structural archaeology emphasizes that things in material remains contain structures which are analogous to sentences in that they can also encode or produce

meaning like the real language (Wylie 2002: 127). Because the linguistic expression directly links cognitive capacity in the human mind, Edmund Leach suggests that the objects in archaeological record should be seen as intentional beings determined by the mind (Leach 1973: 763-764). Many archaeologists such as Leroi-Gourhan (1965, 1968, 1982, 1986), Campbell (2000), Conkey (1982, 1985), Friedrich (1970), Glassie (1975), McGhee (1977), and Washburn (1983a) have contributed to the structuralist view of material cultures since the 1970s. In *Structure and Cognition in Art* edited by Dorothy Washburn (1983a), several archaeologists in particular draw attention to building a theory of structural style in prehistoric and recent indigenous art (e.g. Hardin 1983; Lanthrap 1983; Washburn 1983b).

Inspired by Bourdieu's theory of practice, postprocessual archaeologists draw attention to the active and creative role of symbolic systems embedded in material cultures (e.g., Barrett 1994; Hodder, 1982a, 1982b, 1982c, 1989, 2000; Thomas 1996; Tilley 1989, 1999). Hodder (1982c) has realized that there are prominent differences between material culture and linguistic. First, material culture is directly influenced by human ideas which are produced in social life. Second, the conceptual meanings of material culture are not arbitrary like vocabularies. He thus suggests that we must study material culture contextually (Hodder 2000: 88). The core of the postprocessual approach in studying material culture reflects a historical and social concern. In Conkey's (1989) words, "there is movement away from structuralism to a structural analysis that can elucidate how structures 'make sense' in particular historical contexts of social action" (1989: 152). Material culture is understood as a manifestation of symbolic structures which are situated in relation to social actions and human practices (Tilley 1989: 188).

Usually, symbolism is used in studies of the broad material phenomena which carry meanings invested by humans. However, my research in this dissertation will focus on artistic imagery as symbols.

### **Shamanism Theory**

Shamanism is characterized by trance states or altered states of consciousness (ASC), soul flight, music/dance performance, human/animal transformation, visionary

experience, helping spirits, and other religious phenomena. The general shamanism theorists pay attention to cross-cultural study based on societies from most parts of the world in revealing these basic, universal shamanic characteristics (e.g., Eliade 2004[1964]; Hultkrantz 1978; Winkelman 1997, 2000). According to general shamanism theory and the cross-cultural study on shamanism, scholars have connected archaeological data with these shamanic features to detect the prehistoric shamans' rituals and practices since the 1960s (e.g., Furst 1965, 1968; Reichel-Dolmatoff 1967). Theoretically, approaches in the archaeology of shamanism can be divided into two categories: ethnographic analogy and the neuropsychological model. Ethnographic analogy relies on ethnographic and ethnohistoric literature, which is considered as a "principle theoretical apparatus" (Chang 1967: 229). Many shamanic approaches, which focus on explanations of prehistoric sculptures, pottery paintings, and rock art, have been proposed based on the ethnographic analogy (e.g., Freidel et al., 1993; Furst 1968; Devlet 2000, 2001; Reilly 1989; Stahl 1986; Vanpool 2009; Vanpool & Vanpool 2007).

The neuropsychological model was popularized by Lewis-Williams and the other archaeologists (e.g., Clotte & Lewis-Williams 1998; Lewis-Williams 2002, 2006, 2008; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2005). They connect neuropsychological research with prehistoric art, and claim that prehistoric artworks are the representations of shamanic subjective visions in the human mind. This model is based on neurological experimental work, which posits that people are able to perceive entoptic phenomena and iconic hallucinations during altered states of consciousness (Lewis-Williams & Dowson 1988: 203).

Nevertheless, Lewis-Williams' shamanism theory in archaeological studies has been rejected by other scholars (e.g., Bahn 1988, 1997, 2001; D'áz-Andreu 2001; Francfort 2001; Quinlan 2000; Solomon 1997, 1999, 2001). The major flaws with the neuropsychological model are so-called "ubiquitous-shapes" and the universal nature (Dronfield 1996: 375). The former problem means that there seem to be no clear criteria to differentiate what signs account for entoptic phenomena and what are not entoptics



(Quinlan 2000: 92), while the latter argument points out that the model neglects time, space, and cultural particularity (Dronfield 1996: 376-377).

### **Theoretical Problems**

My review of the contemporary theories on prehistoric art has revealed several theoretical problems that this analysis can contribute to resolving.

**Problem 1:** Archaeological practices are theoretically built on Cartesian dualisms of spirit/material, culture/nature, and mind/body (Vanpool & Newsome 2012: 243). Both cognitive theory and the neuropsychological model maintain that the internal human mind is represented by external material culture. However, since the 1990s, some archaeologists started to question such a rigorous dichotomy and are now inclined to think that binary relations fully guide scholars to wrong conclusions in studies of material culture (Robb 1998; Thomas 1996; Hodder & Hutson 2003).

Cognitive archaeologists have suggested that prehistoric art is always the outcome of cognitive dispositions (e.g., McCauley & Lawson 2007; Mithen 2001, 2004). However, if the art materials in Bering Strait prehistory reflect human internal thought, how and why is the mind materialized? How can we divide the internal thought from the external presentations? Are artworks only information transmitters as stated by cognitive scholars? These questions will be examined in studies of prehistoric Eskimo art in this dissertation.

**Problem 2:** Structural archaeologists have proposed that structures of material culture are like those within linguistics to be governed by binary principles (Leroi-Gourhan 1965, 1968, 1982, 1986; McGhee 1977; Tilley 1991; Washburn 1983a). McGhee (1977) provides a structural analysis of ivory, bone and antler artifacts in Alaskan and Canadian Thule culture. Like many other structuralists, McGhee hypothesizes that a set of dichotomies such as land/sea, summer/winter, man/woman, and antler/ivory constituted semiotic structures embedded in Thule material culture. The primary problem of structural theory is whether such universal rules are adequate for the interpretation of prehistoric art across space and time. If such binary structures really existed in prehistoric material cultures everywhere, how can we explore the cultural particularities and how can we measure social changes? Where are the exact meanings of

artifacts? Are meanings subject to structures? Are meanings and symbolic structures stable and unchangeable or unstable and changeable?

**Problem 3:** One of my major concerns in this dissertation is to examine whether some prehistoric artistic artifacts reflect shamanism. Shamanism in prehistory constitutes one of the most significant debates in contemporary archaeology. While some archaeologists have connected archaeological data and shamanism (e.g., Aldhouse-Green & Aldhouse-Green 2005; Clotte & Lewis-Williams 1998; Devlet 2000, 2001; Hayden 2003; Lewis-Williams & Pearce 2005; Pearson 2002; Price 2001a; Whitley 2000), others are strongly skeptical of the evidence of shamanism in prehistory (e.g., Bahn 1988, 1997, 2001; D'Áz-Andreu 2001; Francfort 2001; Quinlan 2000; Solomon 1997, 1999, 2001). When one intends to conduct systematic research on prehistoric symbolism in the Bering Strait based on the shamanic tradition revealed by the ethnological reports in the eighteenth and nineteenth centuries, the first question that arises is: What percentage of artworks, if any, were created from or associated with shamanism? If we can determine that shamans in prehistory produced some of the artifacts, why were these artifacts created, how were they used in shamanic practices, and what were the meanings of these symbols? If few or none of the symbols have anything to do with shamanism, what are the motivations for the symbolic creations and what are the functions and the meanings of the non-shamanic symbolic complex?

Prehistoric art has been studied for more than a century. One problem in this academic field is that scholars have set out to find a singular theory to understand all the symbolic phenomena in the archaeological record, such as “totemism” (e.g., Frazer 1887; Reinach 2003[1905]), “magic hunting theory” (e.g., Breuil 1952; Reinach 2003[1905]), and “Goddess theory” (e.g., Gimbutas 1982, 1989, 1991). Shamanism theory is not an exception to this archaeological tradition. Even the opponents of the shamanism theory either use another single explanation to replace the shamanic hypothesis (e.g., Solomon 1997, 1999, 2001), or only provide criticism and fail to offer alternative interpretive approaches (e.g., Bahn 1988, 1997, 2001).

The neuropsychological model has a tendency to equate shamanism and trance experience (Lewis-Williams & Dowson 1988). The problems are: can connection between trance and art be verified by ethnographic data? Were all shamanic artworks in archaeological and ethnographic records related to trance or only some of them represented shamanic trance? Were there some non-trance artworks produced from shamanic practices? Is the neuropsychological model a dependable measurement to detect the past shamanism?

### **Methodology and Methods**

Approaches to the archaeology of symbolism usually rely on analyses of ethnographic and ethnohistoric resources. In fact, ethnographic analyses have already been practiced by some scholars in the archaeology of prehistoric Eskimo in the Bering Strait region (e.g., Arutiunov & Fitzhugh 1988; Arutiunov & Sergeev 2006[1969], 2006 [1975]; Collins 1937, 1977; Fitzhugh 2009a; Fitzhugh & Kaplan 1982; Larsen & Rainey 1948; Rainey 1941a). These works have certainly formed a strong research basis for this dissertation.

Based on this academic background, the primary methodology in my study is the ethnological analogy. The ethnographic reports from the Bering Strait region provide a data basis in the study of symbolism among indigenous peoples of the eighteenth and nineteenth century in this area. These literatures include Nelson's report about the Bering Strait Eskimo (Nelson 1900), Murdoch's report about the International Polar Expedition to Point Barrow (Murdoch 1892), Bogoras' and Jochelson's reports about the Chukchi, the Asiatic Eskimo, and the Koryak from the Jesup North Pacific Expedition (Bogoras 1904-1909; Jochelson 1908), and Rainey's report about the Point Hope Eskimo (1947). Moreover, Fienup-Riordan's documentations of the Yup'ik elders' explanations of the spiritual concepts and ethnographic art provide me additional valuable ethnographic

sources (Fienup-Riordan 1988, 1990, 1994, 1996, 2005, 2007). Fortunately, Rainey's collection about the Tigara Eskimo in Point Hope is housed in University of Alaska Museum of the North (UAMN), which includes some artifacts produced directly from the local shamans. The other artifacts bearing artistic symbols stored in UAMN include human/animal figurines, decorated ivory tools, painted and decorated utensils, and various masks from Inupiaq and Yup'ik peoples.

Large archaeological collections excavated from the Bering Strait region in the 1930s and the 1940s are maintained in UAMN. These are collections from the Okvik site on Punuk Islands, excavated by Otto Geist and Ivar Skarland in 1934, the Kukulik site on St. Lawrence Island, excavated by Geist in 1931-1935, and Nukleet site at Cape Denbigh, excavated by Giddings in 1948-1949. The Okvik site shows that it represents the earliest culture and oldest artistic tradition of the Northern Maritime cultural sequence (Rainey 1941a). The Kukulik site, which shows that it is the largest kitchen middens in the Bering Strait region, includes continuous cultural layers from the OBS period, the Punuk period, and the Thule period, to the historic period. Kukulik artifacts, including artistic productions, thus reflect vivid cultural changes over 1,500 years before 1880 (Geist & Rainey 1936). The Nukleet site represents the Thule materials. The decorated ivory objects and large-numbered wooden dolls manifest the artistic fashion of Western Thule culture (Giddings 1964).

These three sites are the foundation for my archaeological data. Additionally, a few select specimens are also from other sites on the St. Lawrence and the Punuk Islands, which were collected by Geist in the 1920s and 1930s. In the summer and the fall of 2012, I was permitted to collect data from the abovementioned sites at the University of Alaska Museum of the North.

My regional studies were hence designed to focus on St. Lawrence Island, the Punuk Islands, and the adjacent Bering Sea coast where the Nukleet site is located. First, the archaeological collections of these three sites are completely housed in UAMN. Only a small numbers of archaeological artifacts from other sites on St. Lawrence Island and the Punuk Islands were collected by Geist and later donated to UAMN. Second, the

Okvik site collection represents the typical Okvik assemblage, while the Kukulik site, as the largest midden on St. Lawrence Island, includes both typical OBS and Punuk assemblages. As a Thule site which might receive strong Punuk influence, the Nukleet assemblage contains rich art symbolism. The collections from these three sites provide me an access to examine the complete cultural sequence of the Northern Maritime tradition.

### **Data Collection - Sampling**

The Okvik assemblage, Kukulik assemblage, and Nukleet assemblage represent different cultures. Most artifacts from the Okvik site are attributed to Okvik culture, while the Kukulik site includes OBS, Punuk, Thule and historical deposits and the Nukleet is a Thule culture site. Due to the difference of materials excavated from these three sites, I used different methods to select samples.

Geist's excavations at the Okvik site were undocumented. Though excavations at the Kukulik site were documented, an accidental fire in Geist's house in Fairbanks in 1965 completely burned all Kukulik documentations. The reports of these three sites were all published. The Okvik report includes documentation of the artifacts, but not the stratigraphy. For the artifacts from the Kukulik site and the Nukleet site, I relied on the published reports to reconstruct the depositional context of selected specimens. Almost all samples were photographed, measured, carefully observed, and described in my notebook. For several artifacts which have weathering conditions, I collected electronic photocopies and descriptions from the museum files.

A few samples were selected from Geist's collections from the Gambell sites, the Punuk site, and unknown provenance on St. Lawrence Island. The excavation or collecting details about these artifacts are unknown.

**Okvik Site:** The artifacts excavated from the Okvik site were documented in *Eskimo Prehistory: The Okvik Site on the Punuk Islands* (Rainey 1941a). There are 185 harpoon heads that were decorated with typical Okvik designs. In his report, Rainey categorizes Okvik harpoon heads into five major types according to typological analysis,

but does not elaborate descriptions of decorative designs. Collins, however, focuses more on the styles of the designs on the harpoon heads and other implements (1937). He classifies basic Okvik incising designs into three sub-styles. Both body types and art designs were considered when I selected samples from the assemblage of the harpoon heads. Additionally, some harpoon heads of a special type or with special designs were also selected as samples. For example, a whaling harpoon with relatively large size was selected as a special sample for my observation.

There are sixteen decorated ivory dart heads included in the Okvik collection. The designs on these dart heads are basically similar, and are characterized by straight or slightly curved lines. I intentionally selected several relatively-complete specimens for better observations.

Other decorated ivory implements include harpoon socket pieces, foreshafts, counterweights, harpoon rests, lance heads, snow goggles, boat hook barbs, men's knife handles, ulu handles, and blubber scrapers and cups. Each of these artifacts has a particular incising design. Therefore, all of these artifacts were sampled.

I was especially aware of the artifacts with circle-dot motifs and eye-like designs, because these designs are prominent in Eskimo ethnographic studies. I thus sampled all specimens with circle-dot and eye motifs.

McGhee's structural analysis of Thule technology is mainly based on the relations between decorated and undecorated artifacts and between ivory and antler artifacts (McGhee 1977). For this reason, I also selected several undecorated ivory artifacts (such as ice picks and mattocks) and antler artifacts as samples.

Ten animal ivory figurines and twenty-three human ivory figurines were found in the Okvik site. Except for two human figurines exhibiting weathering conditions, all others were selected for my observations.

**Kukulik site:** According to the report of the Kukulik site (Geist & Rainey 1936), most artifacts decorated with OBS designs were excavated from lower levels of the site, such as the base of the deposit of the test trench, the deposit below the third house, the deposit at the northeast beach slope, and the base of the beach slope in the West Mound.

These OBS artifacts include harpoon heads, counterweights, socket pieces, harpoon receivers, ulu handles, blubber scrapers, needlecases, and animal and human figurines, and all of these specimens were sampled. A few OBS artifacts were found in upper levels. Except for several artifacts showing weathering conditions, others were selected. Generally, OBS artifacts excavated from Kukulik site are much fewer than Punuk and Thule artifacts. In total, I observed thirty OBS specimens.

In contrast, larger numbers of Punuk harpoon heads were found in the Kukulik site. Geist and Rainey classify Punuk harpoon heads into three types in terms of their shapes and designs (1936). I selected several relatively complete specimens from each type. Samples from other ivory implements such as counterweights, socket pieces, knife handles, foreshafts, wrist guards, bag handles, combs, and some unidentified objects were selected. Generally, the Punuk designs from the Kukulik site include converging lines, ticked lines, curved lines, Y and V figures, and circle-dot motifs. A special focus was given to circle-dot motif and some artifacts with such a motif were sampled. Relatively, Punuk culture in the Kukulik site produced fewer animal figurines and all of them were selected and observed. No Punuk human figurines were found.

Some undecorated ivory and bone (antler) artifacts excavated from the early levels are associated with OBS and Punuk decorated objects. Samples from these undecorated artifacts (including the artifacts with simple longitudinal lines), including dart heads, ice picks, adze heads, fish line sinkers, and armor plates, were also selected for future comparative analysis with decorated artifacts.

The artifacts belonging to the Late Thule and historical Eskimo periods were largely excavated from the Kukulik site. Because all harpoon heads have almost no incising designs, I selected several specimens representing typical Thule types. Several ivory implements with decorations excavated from the Late Thule level were also selected.

Thule and historical Eskimo deposits also included numerous wooden animal and human figurines, as well as a small number of ivory human, animal, and bird figurines. Samples from wooden and ivory figurines were selected.

**Nukleet Site (including the adjacent Iyatayet site):** Several of Nukleet harpoon heads are decorated and all of the decorated harpoon heads were selected. However, numerous antler brow bands were found in the Nukleet site and most of them were decorated with geometric designs. About twenty specimens are relatively complete and all of them were sampled. The selected decorated artifacts also include ivory needlecases, cord attachers, bag handles, and pendants. Several samples of antler and ivory implements such as combs, needlecases, bladder mouth pieces, buttons, cord attachers, and creasers were carved in human or animal forms.

A large number of wooden (or bark) human figurines were found in the Nukleet site. Many of them show weathering conditions and have been broken off. Some relatively complete specimens in better condition (around twenty specimens) were sampled.

**Ethnographic Samples:** I selected ethnographic samples from four categories of artifacts according to sources, materials, and functions in order to identify which of them might be used for religious purposes and which were potentially used for secular purposes. The first category is artifacts collected directly from shamans or from the shaman's family. The second category refers to decorated ivories, ivory implements in animal forms, and painted utensils. The third category is wooden human figurines. The fourth category is various masks including both religious and secular masks.

### **Data Collection – Evaluation**

I used Collins' documentation of excavations at Gambell on St. Lawrence Island (1937) and the report of the Okvik site (Rainey 1941a) to evaluate Okvik artifacts. Because the excavation was undocumented, the stratigraphic context was lost. My evaluation of Okvik artifacts thus focused on typology and styles of incising designs. According to the typological analyses of the unearthed artifacts, Collins has identified the pre-Punuk components from the Gambell sites into three styles: OBS I, OBS II, and OBS



III (Collins 1937). The OBS I components are similar to assemblages at the Okvik site. Relying on Collins' and Rainey's typological analysis, I formulated my knowledge of structural and functional features of the Okvik artifacts.

The evaluation of OBS and Punuk artifacts was built on Collins' report of Gambell (1937) sites, the report of the Kukulik site (Geist & Rainey 1936), and Fitzhugh's thesis about prehistoric Eskimo art (2009b). In stylistic analysis of OBS incising designs, I followed Collins' identification to categorize decorated artifacts into two groups: style II and style III. The identification of OBS animal and human figurines was based on Collins' (1937) and Fitzhugh's (2009b) analysis of art designs, because almost all discovered OBS figurines were incised with typical OBS designs. In typological analysis of OBS harpoon heads, I relied on Geist and Rainey's classification of Type I, J, and K.

The identification of decorated Punuk artifacts was based on Collins' report (1937), Fitzhugh's thesis (2009b), and Geist and Rainey's report (1936). In typological analysis of Punuk harpoon heads, I relied on Geist and Rainey's classification of Type D, E, and F. My reconstruction of the stratigraphic context of the sampled OBS and Punuk artifacts from the Kukulik site relied on Geist and Rainey's report (1936).

Stratigraphic contextual examinations and functional and stylistic analysis of Nukleet artifacts were based on Gidding's report of the Nukleet site (1964). The museum files, which record stratigraphic provenance of each artifact, helped me to conduct contextual analyses.

I used Nelson's ethnographic report about the Bering Strait Eskimos (1900), Ray's monograph (1967) and Fienup-Riordan's monograph (1996) about Eskimo masks, and Rainey's report of Tigara Village (1947) to evaluate the functions and symbolic meanings of ethnographic artifacts. Some artifacts have information documented in the museum files while information on others has gone missing.

## **Data Analyses**

My data analyses included two steps. The first step was ethnographic analogy; the second was contextual examination.

Ethnographic data were built mainly from several reports in both Siberia and Alaska (Bogoras 1904-1909; Fienup-Riordan 1988, 1990, 1994, 1996, 2005, 2007; Jochelson 1908; Murdoch 1892; Nelson 1900; Rainey 1947). The selected archaeological samples, most of which are engraved and sculptural artifacts, include ivory (or bone) hunting tools such as harpoon heads, socket pieces, and counterweights, ivory (or bone) utensils, and ivory or wooden human and animal figurines. The ethnographic data demonstrate that the creation of these sculptural and decorative artworks involved multiple motivations and a variety of artifacts are usually encoded with variant connotations. According to the investigation of artistic production among ethnographic collections from this region, I was inclined to hypothesize that the artistic complex consists of multiple-purposed artifacts which might bear potential spiritual or secular meanings.

Following data collection at UAMN, I compared ethnographic artifacts with the archaeological artifacts featuring artistic symbols, such as sculptures and decorated artifacts. An analysis was conducted to see which archaeological artifacts resemble the artworks among ethnographic collections. I was specifically aware of which archaeological artifacts were most likely used by shamans for rituals, or were used by individuals as amulets and charms, and which were used for story-telling or amusement purposes. The above ethnographic reports helped me to identify the functions and meanings of some artifacts and some artistic designs.

My data analyses also considered to the cultural context of the artistic symbols. Related archaeological excavation reports helped me in determining which cultural context the artifacts may be associated, such as settlement, cemetery, gender, economic activity, ceremonial activity, and recreational activity. In addition to the reports of the Okvik site, the Kukulik site, and the Nukleet site (Geist & Rainey 1936, Giddings 1964, Rainey 1941a), I have also referenced the excavation reports of other archaeological sites

(Arutiunov & Sergeev 2006[1969], 2006 [1975]; Bandi & Blumer 2002; Collins 1937; Giddings 1967; Giddings & Anderson 1986). For example, the artifacts associated with middens and houses are usually discarded broken implements and tools, while the artifacts excavated from graves are deposited complete objects.

I further conducted a study of how context of the symbols, including social, historical, and environmental factors, shape and influence the trend of artistic tradition, and how art interacted with social actions and how art might function in societies. The stylistic changes during the Punuk period, in my analyses, might associate with changes of economic activities, social organizations, population, settlements and natural environment.

### **Theoretical Analyses**

Focusing on the empirical and theoretical problems mentioned above, I tested contemporary theories, including cognitive archaeology, structural archaeology, and general shamanism theory, in my analysis of the prehistoric artistic tradition in the Bering Strait region.

Observation of the collections suggests that the regional variations and periodical changes of art symbolism in the Bering Strait region are evident. Mason has proposed a “climate change” model to explain the stylistic changes through time (2009b). Relying on Bourdieu’s (1977) and Giddens’ (1979) theory of practice, I have recognized that this climate-centric explanation overlooks human actions as active factors. I thus maintain that the variations of prehistoric art productivity were more likely determined by cultural and historical elements rather than by climate change.

Ethnological analyses demonstrate that prehistoric artworks had a diversity of purposes. While some were used for shamanic practices, others functioned as story-telling devices and playing toys. General shamanism theory, especially the neuropsychological model states that shamanic artworks are produced from shamanic trance experience (see Clotte & Lewis-Williams 1998; Lewis-Williams 2002; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2005; Pearson 2002; Whitley

1998, 2000). However, when I tested the neuropsychological model in analyses of prehistoric Eskimo art, I found that this universal trance model is not suitable to explain all artworks, even only for those potentially used for shamanic purposes. Some designed motifs might be from shamanic knowledge but not from trance experience. For this reason, “animist ontology” – a recently proposed theory – is employed to interpret those artworks potentially associated with shamanism in terms of the results from ethnological analogy (Viveiros de Castroa 1998a, 1998b, 2004). This new animism theory further helps to prove that Cartesian dualism has guided the interpretation of prehistoric art in the wrong directions. There is no distinct division between internal and external, mind and body, and culture and nature. The two opposites in a dichotomy are actually permeable rather than separated.

The binary structural model, proposed by some archaeologists such as Leroi-Gourhan (1965, 1968, 1982, 1986) and McGhee (1977), was also tested in the analysis of art structures in the prehistoric Bering Strait region. My examinations attempt to reveal if such a binary structure model is reliable for interpreting prehistoric art.

### **Structure of the Dissertation**

Chapter 2 offers theoretical approaches to illustrate how archaeologists in the last several decades have used cognitive theory, symbolic and structural theory, and shamanism theory to explain the meanings of prehistoric art and to attempt to reconstruct the spiritual and aesthetic past.

Chapter 3 examines the trajectory of the artistic tradition of the Northern Maritime cultures in an unbroken cultural sequence in order to understand the background of prehistoric art and culture in the past 2,000 years in the Bering Strait region. This prehistoric Eskimo’s cultural continuity includes the Okvik, OBS, Punuk, Birnirk, and Thule cultures. Although the Ipiutak culture is usually excluded in this cultural sequence, I still include it in my review due to its strong artistic tradition and its art similarities with Okvik and OBS cultures.

Chapter 4 synthesizes the ethnographic material cultures of the Bering Strait region in the nineteenth and twentieth century according to the published ethnographic and ethnohistorical literatures. The focus is centered on the symbolism related to daily life, ceremonialism, and shamanic practices.

Chapter 5 presents an ethnological analogy of the symbolic motifs of the Northern Maritime cultures. The analysis is based on the archaeological data mainly from the Okvik site, Kukulik site, and the Nukleet site. The focus is on three art forms analyzed in terms of ethnographic materials: the circle-dot motif on decorative art, animal figurines, and human figurines. Analyses reveal that the motifs among Northern Maritime cultures were bestowed with multiple meanings. Some symbols can be verified to be related to the shamanic ritual practices, while others might serve as story-telling props or children's toys.

Chapter 6 attempts to offer cognitive and structural analyses of the art symbolism in the Bering Strait region. With regard to the empirical and theoretical problems I have proposed above, I test the theories of structuralism, cognitive archaeology, and general shamanism theory in analysis of symbolic systems in order to find a more effective way to interpret prehistoric Eskimo art. The main problems of cognitive and structural theories are that they both see materials as passive, and they separate the human body and mind. The cultural and historical elements are thus neglected. Additionally, structuralists and cognitive archeologists have not only overlooked theory of practice, but also the indigenous animist ontology and epistemologies. In this way, my arguments in this chapter are built on practice theory and new animism ontology to explain the variants of art productivity, cosmological structures, and relationships between humans and materials. Particularly, I highly emphasize that the animist ontology is an effective way to enable us to enter the prehistoric mindset, rather than rely on our modern assumptions. Combining regional ethnographic analyses and contextual studies, I argue that the prehistoric Eskimo art symbolism was created based on the animistic ontology and epistemology.

In Chapter 7, I summarize central points of each chapter, which leads me to conclude the empirical and theoretical problems.

## **Chapter 2: Cognitive Archaeology, Symbolic/Structural Archaeology, and the Archaeology of Shamanism**

The earliest art appeared in the transition between the Middle and Upper Palaeolithic periods<sup>1</sup>, which is often described as a “cultural explosion” (e.g., Mithen 1996, 1998, 2000), a “creative explosion” (e.g., Pfeiffer 1982), or a “symbolic explosion” (e.g., White 1982). Europe has long been considered the center of the production of Palaeolithic art, such as cave paintings and figurines (e.g., Ucko 1962, 1967; Sandars 1968), but recent archaeological discoveries show that the Paleolithic art has been discovered in the areas beyond the Europe. The evidence of portable art and rock art from the late Pleistocene era has been frequently reported in a number of different countries in North and South America, Africa, Asia, and Australia during the last three decades (Bahn 2007; Bednarik 2001; d’Errico et al., 2001).

The Neolithic revolution is not only characterized by the inventions of cultivation and animal husbandry, but also by innovations of symbolic representation. Neolithic art across the world is highly variable and is usually associated with human sedentary life; the assemblage consists of sculptures, reliefs, engravings, and paintings done on materials such as stone, ceramics, wood, bone, and ivory. Jacques Cauvin calls the Neolithic art phenomenon a “revolution of symbols” (2000: 22).

The impact of cultural evolution theory on archaeology in the late nineteenth century and early twentieth century was profound. Evolution was the initial theory used by early archaeologists to provide explanations of prehistoric art. Totemism and sympathetic hunting magic are models directly inspired by evolutionary theory in interpreting ancient symbolism (Breuil 1952; Reinach 2003[1905]). However, they have today been recognized as fraught with difficulties (Insoll 2004; Schaafsma 1989),

---

<sup>1</sup> There is still no consensus about the age of earliest art. Mithen (1996: 152), for example, identifies the period of this transition as 60000 – 30000 BP, while Conkey (1987: 413), as well as André Leroi-Gourhan (1965: 26) believe that the earliest art occurred at around 30000 BP.

because such scholars failed to find support either in ethnographic data or in archaeological records (Keyser & Whitley 2006: 5). Theoretically, the biggest problem of such a view is that it is not credible that a single explanatory model can cover image-making phenomena over 20000 years (Conkey 1999: 300).

Current theoretical trends in studies of prehistoric art mainly rely on cognitive and structural approaches. Additionally, shamanism theory, or the trance model, has begun a hot debate in explorations of potential shamanism from prehistoric art since the 1980s. For this reason, this chapter provides an overview of the above three theoretical approaches with an aim to examine how archaeologists understand prehistoric art in these three sub-disciplines, and how they use cognitive archaeology, symbolic and structural archaeology, and shamanism as research tools to interpret visual images that have survived from the far past.

### **Cognitive Archaeology**

The rise of cognitive archaeology in the 1980s attempted to shed light on many questions, such as: can archaeologists have any access to the human mind in prehistory? Is there any connection between tool-making and the evolution of language? Does archaeology realize its goal to reconstruct the past, or does it only meet the need of modern ideological fashions (see Whitley 1998: 1)? Cognitive archaeologists firmly believe that material culture that was produced depends on the ability of human cognitive processes. As Thomas has emphasized, “It follows that whatever we can learn human neural physiology and computational abilities can enhance our ability to comprehend the archaeological record, and conversely that the archaeological record may illustrate the evolution of the human mind” (2004: 181). They also believe that “archaeological evidence can be used systematically to provide insights into the way of thinking of cultures and civilizations long dead,” and that archaeological procedures can be



conducted “for analyzing and testing cognitive hypotheses about the past” (Renfrew & Bahn 2000: 420).

So far, cognitive archaeology has experienced over three decades of development, and a diversity of approaches has been proposed. The definition, development history, fundamental theoretical and methodological frame, and main concerns of cognitive archaeology are discussed in this section.

### **Definition of Cognitive Archaeology and Its Brief History**

Cognitive archaeology is also called archaeology of the mind. It is “the study of past ways of thought as inferred from material remains” (Renfrew, 1994a: 3). This brief definition is broadly cited by cognitive archaeologists. However, Flannery and Marcus (1998) offer a definition with more explicit details:

Cognitive archaeology is the study of all those aspects of ancient culture that are the product of the human mind: the perception, description, and classification of the universe (cosmology); the nature of the supernatural (religion); the principles, philosophies, ethics, and values by which human societies are governed (ideology); the ways in which aspects of the world, the supernatural, or human values are conveyed in art (iconography); and all other forms of human intellectual and symbolic behavior that survive in the archaeological record. (pp. 36-37)

In addition to cosmology, religion, ideology and iconography, Flannery and Marcus indicate that “the common subsistence-settlement behaviors as hunting, fishing, farming, plant collecting, tool-making, and so on” should also be included in the scope of the studies of human cognition (1998: 37).

Cognitive archaeology includes two general topics. The first topic focuses on evolution and origins of human cognitive abilities for information processing during the Paleolithic period. The second topic deals with relations between material representation and human thought such as cosmology, ideology and religion from Neolithic period onwards (Flannery & Marcus 1993: 36-37; Mithen 1998: 9; Renfrew 1994a: 5). Renfrew

and Bahn (2000) put forward a long list of major aspects of human cognition, which includes evolution of language and self-consciousness, design in tool manufacture, procurement of materials, measurement of time, organization of behavior, burial, artistic representations, literacy and writing, conceptualization of warfare, establishment of the location of memory, measurement, construction planning, value and organization, power, cult and religion, etc. (Renfrew and Bahn 2000: 385-420). Interestingly, April Nowell (2001) simply divides cognitive approaches into two types in terms of the periodical stages of prehistory: cognitive archaeology of the Paleolithic period, and cognitive archaeology of the Neolithic period and onwards. It is worth noting that she attempts to clarify that the two approaches virtually employ entirely different methodologies because of their different goals. The first type aims to study “the evolution and development of human cognition, language and symboling,” and archaeologists who follow this approach thus build their theories mainly on the use of the other disciplines, such as biology, primatology and psychology, and by integrating archaeological data with information from these datasets (Nowell 2001: 20). The second type concerns the religion, cosmology, iconography and ideology by integrating archaeological investigations with data in historical records and ethnographical materials (22).

Cognitive archaeology was established by challenging behavioral archaeology. It is based on the belief that human cognition played a vital role “in the creation of archaeological record,” and it seeks to achieve “an adequate explanation or interpretation of past behaviors” (Whitley 1998: 5). Behavioral archaeology is the study in “the reconstruction of the cultural past through behavioral inferences” (LaMotta & Schiffer, 2001: 14). It aims to construct methods and theories to explain “all forms of variation and change in human social life in terms of behavior” (14-15). Lacking confidence in processual theory, some archaeologists in mid 1970s (e.g., Reid et al., 1975) intended to shift archaeological focus from the cultural processualism to the behavioral variation (LaMotta & Schiffer, 2001:15). However, behavioral archaeology has been criticized for its essentialist ontology, because it holds that human behavior “has configurational properties that all members of the species possess” (O’Brien et al. 1998: 495).

Archaeologists who pioneered toward cognitive archaeology in the 1970s included Alice Kehoe and Tom Kehoe (1973), Kent Flannery and Joyce Marcus (1976), and Robert Hall (1977). In 1973, Alice Kehoe and Tom Kehoe (1973) published their paper “Cognitive Models for Archaeological Interpretation,” in which they “challenged the validity of the standard ecosystemic approach and proposed that archaeology refocus itself around the cognitive basis of human life” (Preucel, 2006: 149). In their 1976 paper, Kent Flannery and Joyce Marcus (1976) also rejected ecosystems by attempting to investigate the cosmological beliefs of the ancient Zapotec Indians. Even though at that moment they did not see themselves as cognitive archaeologists, their theory indeed involved “some aspects of cognition” (Flannery and Marcus, 1998: 36). In 1977, Hall (1977) continued to criticize the ecosystems of processualism and claimed that a cognitive archaeology is a possible way to understand the symbolism of the past:

The feasibility of cognitive archaeology derives from two main sources: (1) the universal human associative mental processes involved in much of language, magic, curing, literary and artistic expression, and science; and (2) the resulting interdependence of the cultural subsystems based upon these mental processes. Using clues from the ethnographic record and a broad regional, deep time perspective, I believe it is possible to infer a structure of symbolic meaning from many archaeological remains. (pp. 500)

Hall (1977) not only proposed a cognitive model in theory and methodology, but also conducted a concrete analysis of the symbolic meaning of Indian weapon artifacts, bridging the gap between material remains and human cognition. However, the first archaeologist to systematically introduce cognitive sciences into archaeological studies is usually thought to be Thomas Wynn. From the end of the 1970s, but mostly in the 1980s, he applied child psychology in his research of Paleolithic tool-making (Wynn 1979, 1981, 1991).

In Renfrew's 1982 inaugural address to Cambridge University faculty and students was titled "Towards an Archaeology of Mind" (1982). Renfrew put forward three fundamental factors in the study of cognitive archaeology, including "the nature of intelligent behavior, the methods for recognizing such behavior in the archaeological record in the absence of informants, and the procedures for making inferences from material culture about such behavior" (Preucel 2006: 150). In 1990, the first professional conference on the topic "cognitive archaeology" was held at Lucy Cavendish College, Cambridge University. The conference, successfully organized by Renfrew and Zubrow, resulted in a volume *The Ancient Mind*, which has been broadly cited since its publishing in 1994 (Renfrew and Zubrow 1994).

Cognitive archaeology is considered a new intellectual phase of processual archaeology. In his 1994 paper, Renfrew (1994a) suggests that cognitive archaeology should be re-termed "cognitive-processual archaeology." In order to distinguish the cognitive approach from the early processual approaches in the 1960s and 1970s, which only focus on economics and technology but ignore ideological systems, Renfrew (1994a) re-terms the early processual approaches as "functional-processual archaeology." As he states, "It may be permissible to claim that processual archaeology, far from expiring, has entered a new phase which one might term 'cognitive-processual archaeology', acknowledging by that term both the principal field of study and the intention of working within a tradition which is broadly scientific, like that of the functional processual archaeology of twenty years ago" (1994a: 3). He goes on, "A cognitive-processual archaeology will seek to be as 'objective' as possible, while not laying claims to objectivity in any ultimate sense" (10). In the scope of cognitive-processual archaeology, as he emphasizes, "the most concise approach is to focus explicitly upon the specially human ability to construct and use symbols" (5).

To sum up, the first concern of cognitive archaeology is centered on the origins and evolution of human cognitive abilities which are related to consciousness, language, and strategic use of tools (e.g., Deacon 1997; de Beaune et al., 2009; King 1999; Mithen 1996, 2000, 2001, 2006; Nobel & Davidson 1996). The second focus is cognitive

processual studies, which are related to material culture and symbolic systems, including prehistoric religion (e. g. McCauley & Lawson 2007; Mithen 2001, 2004; Tremlin 2006) and prehistoric art (e. g. Clotte & Lewis–Williams 1998; Donald 2009; Lewis–Williams 2002, 2008; Lewis-Williams & Pearce 2005). Because this dissertation is dealing with prehistoric art and the ideology reflected by art production, including religious and cosmological thought, I will specifically attempt an integrated examination of prehistoric ritual and cult with prehistoric art in the remainder of this section.

### **Cognitive Perspectives on the Prehistoric Ritual and Cult**

Religious studies were neglected by processualists and their predecessors in the 1950s and 1960s. This archaeological trend was initiated by Christopher Hawkes' (1954) famous “ladder of inference,” which has now been criticized by many religious archaeologists (e. g. Bertermes & Biehl 2001; D áz-Andreu et al. 2009; Insoll 2004; Nicole 2009; Nowell 2001; Robb 1998). His hierarchical inference includes four layers:

- 1) To infer from the archaeological phenomena to the techniques producing them I take to be relatively easy...
- 2) To infer to the subsistence-economics of the human groups concerned is fairly easy...its logic is simple, and need never be anything but straightforward.
- 3) To infer to the social/political institutions of the groups, however, is considerably harder...
- 4) To infer to the religious institutions and spiritual life may seem superficially, perhaps, to be easier, and for the first few steps it may sometimes be so...In general, I believe, unaided inference from material remains to spiritual life is the hardest inference of all. (Hawkes 1954: 161-162)

The absence of religion in Processual archaeology, which arose during the 1960s, appears to be a problem in the history of archaeology. Sears has realized, “Archaeological practice, like that of any other science, is conditioned by the problem-interest and awareness of its practitioner” (1961: 224). This is quite right. The neglect of religion was

caused by the particular methodological and theoretical approaches employed by the processualists.

Processual Archaeology is also called the New Archaeology. “The principle goal of archaeology” is to understand “the cultural change (process) in varying environmental and cultural settings” (Sabloff 2005: 164). One of the main processualist concerns is “system thinking” (Johnson 1999: 22-24). In Hodder’s words, “The functionalist and processual emphasis in archaeology aimed objectively to identify relationships between variables in cultural systems” (Hodder 1982b: 3). Lewis Binford was one of the leading processualists of the 1960s, and his “archaeology as anthropology” (1962), as well as the other articles, announced the birth of the processual school in archaeology.

Although Binford does see religion as a component within the discipline of archaeology, the problem is that he discourages archaeologists to conduct ideological studies. In his 1962 paper, Binford proposed three major functional sub-classes of material: technomic, socio-technic, and ideo-technic. Among the three classes, ideo-technic artifacts are “the items which signify and symbolize the ideological rationalizations for the social system and further provide the symbolic milieu in which individuals are enculturated, a necessity if they are to take their place as functional participants in the social system” (Binford 1962: 219-220). However, Binford has misgiving of the availability to grasp man’s ideology from archaeological materials, because culture, in his definition, is “man’s extrasomatic means of adaptation” (Binford 1965: 205). Hence, the main concerns of processualists are technology and subsistence, but religion as “mental constructs” is treated as “epiphenomenal” (Whitley 1998: 9).

The turning point happened at the beginning of the 1980s with the birth of cognitive archaeology, in which systematic studies on religious subjects were advocated. The problem for early processualists in the 1960s and 1970s is that it is difficult finding a methodology to build a connection between human ideology and material remains. However, for cognitive archaeologists, the awareness of the human mind and cognition make them believe that they have found a way to investigate symbol, cult and religion (Bertemes & Biehl 2001: 13). In his 1994 paper, Renfrew states, “A cognitive-processual

archaeology will seek to be as ‘objective’ as possible, while not laying claims to objectivity in any ultimate sense” (1994a: 10). In the scope of cognitive-processual archaeology, as he emphasizes, “the most concise approach is to focus explicitly upon the specially human ability to construct and use symbols” (5). Based on this perspective, how ancient people used symbols to communicate with the supernatural world certainly appears to be the other focus in cognitive archaeology (8).

Doubtlessly, archaeological data provide a basis to investigate the past mind, but, for cognitive archaeologists, “these data must somehow be reconciled with data from linguistics, neurology, psychology and so on” (Nowell 2001: 27). The multiple disciplinary methods in cognitive archaeology led workers “to step beyond the object”, “to attempt to reattach the emotion, belief, and action associated with material remains” (Steadman 2009: 45). This implies that the cognitive approach has laid the foundation for the archaeology of religion. As Pascal Boyer emphasizes, “religion, in terms of cognitive process, is common to all human brain, part and parcel of how a normal mind functions” (2001: 318). Renfrew also stresses that working on the past mind, one “must inevitably consider the archaeological approach towards religion” (1994b: 47). Based on this perspective, many cognitive archaeologists (including Renfrew) invest their endeavors to the field of religion and their attempts have recovered the tradition of religious studies after the halt during early processualist period (e.g., Flannery & Marcus 1994; Fogelin 2007; Mithen 2004; Nowell 2001; Renfrew 1985, 1994b). In his *The Archaeology of cult* (1985), Renfrew approaches the identification of ritual sites, symbols and representations in Aegean Bronze Age sites at Phylakopi, and attempts to show us how the material culture can lead archaeologists “directly to valid insights into long-vanished belief systems” (Renfrew 1985: 1). In the other paper, “The Archaeology of Religion” (1994b), Renfrew develops a methodology upon the recognition of ritual. Even though cognitive archaeology focuses on religion as an important part of its studies, generally, its methodology is similar to processualism but differs from postprocessualism. It still continues the scientific tradition of processualism to explain the past (Nowell 2001: 27). In Steadman’s words:

The cognitive science moves the study of humans and their beliefs into the scientific realm, while allowing it to study firmly anchored in cultural structure. As research continues, the complex intersections of psychology, science, culture, and religion will continue to reveal insights into the origins, and continued practice, of religion in worldwide contexts. (Steadman 2009: 35)

Hawkes' so-called "ladder of inference" (Hawkes 1954) has lost its readers today because current archaeologists believe that there are no differences between religion and the other subjects in archaeology at the level of being difficult or easy; they tend to see the archaeology of religion as conceptually and methodologically simple "as other branches of archaeological research and should proceed in pretty much the same way" (Fogelin 2008: 131). Fogelin thus suggests that the archaeology of religion "should start with material predictions derived from understandings of particular contexts and general anthropological theory," as any other branch of archaeology does (140). Bertemes and Biehl (2001) are also imbued with confidence in the archaeological study of religion. They claim:

- 1) The analysis of prehistoric cult and religion is by no means more difficulty to undertake than the analysis of other parts of prehistoric societies.
- 2) A consistent theoretical framework for the analysis and interpretation of cultic/ritual/religious data is an indispensable prerequisite.
- 3) The Study of prehistoric cult and religion is important in order to understand a prehistoric society as an entirety that consisted of technological, economic, social, political and religious-spiritual elements. (p. 16)

Renfrew (1985) firstly verifies four groups of features to identify the evidence of cults in his 1985 paper on the Phylakopi Sanctuary on the Greek island Melos. In his 1994 paper, "The Archaeology of Religion," Renfrew (1994b) categorizes these four features into 16



archaeological indicators. In his suggestion, the first feature is associated with the focusing of attention. A special spot is assumed to be chosen with special associations such as a cave, a tree, or a mountaintop. A special building may also be used for purposes of sacred functions. Some attention-focusing devices such as altars, hearths, lamps, and ritual vessels may be employed. Whether a natural space or an artificial building, they both may be equipped with rich symbols. The second group is a boundary zone between the secular and the supernatural. Both noticeable public display and hidden mysteries may be involved in ritual. Meanwhile, the facilities (e.g., pools or basins of water) may refer to concepts of cleanliness and pollution. The third group is related to the presence of the deity. The images may be used to represent deities in various forms. Ritualistic symbols may be used to refer to the deities and may be associated with myth. Animal symbols (including mythical animals) are common motifs in various representations. The fourth group is about ritual participation and offering. The art or iconography of decorations often reflects the worship practices (e.g., gesture of adoration). Various devices such as dance, music, drugs, and the infliction of pain may be employed for inducing a religious experience. Humans may practice the sacrifice of animals or even humans, and may bring food and drink as offerings, as well as the other material objects. To dispose of the offerings, materials may be broken, hidden, or discarded. Wealth in great quantities may be consumed by the cult, whether it is invested in the equipment, the offering or in the structure (Renfrew 1994b: 51-52).

In her study of Mesoamerican archaeology, Marcus (2007) lists eight components of the religious ritual and believes that some of them are “more likely to leave archaeologically recoverable traces than others” (Marcus 2007: 47):

- 1) One or more performers
- 2) An audience (Humans, deities, ancestors)
- 3) A location (temple, field, patio, stairway, cave, top of an altar)
- 4) A purpose (to communicate with ancestors, to sanctify a new temple)
- 5) Meaning, subject matter, and content

- 6) Temporal span (hour, day, week)
- 7) Actions (chanting, singing, playing music, dancing, wearing masks and costumes, burning incense, bloodletting, sacrificing humans or animals, smoking, making pilgrimages to caves or mountaintops)
- 8) Foods and paraphernalia (stingray spines, obsidian blades, cones and spheres of copal incense, balls of rubber, paper streamers, beverages, meats, tamales) used in the performance of rites. (pp. 48)

The above perspectives lead archaeologists to examine these traces in archaeological practice. Christina Marangou (2001), for example, explores some Neolithic and Early Bronze Age sites from Greece in an attempt to grasp the distinguishing features between religious ritual and secular places. Her surveys and analysis involve indications such as settlements, spaces with fire, areas around water sources, open spaces, closed spaces, storage spaces, and pits, and artifacts such as spindle whorls, jewellery, bangles, pins, beads and shells. Her conclusion shows that religious ritual behavior occurred as early as in the early Neolithic period in Greece. In the Neolithic period, ritual practices were likely to involve a few dwellings which share the same oven or pit in the yard. In the Bronze Age, evidence of ritual practices is often found to occur in open spaces. In her discussion, repetition behaviors are important implications to associate ritual practices which include frequent jug-broken, the deliberate placement of animal figurines in certain of places, and the disposition of human figurines.

Cognitive archaeologists are characterized by their belief that artifacts are reflections of human psychological states and cognitive progress. Renfrew (1985) points out that, though we do not have the direct access to the belief system in the human mind, we can explore the past ritual and belief through four types of ways from the archaeological record, which include verbal testimony (oral or writing material), direct observation of ritual practices, study of non-verbal records (document about belief, deities, mythical events and ritual practices), and study of ritual materials (Renfrew 1985: 12). Renfrew holds a firm attitude “to valid insights into long-vanished belief systems”

(1985: 1) and maintains that cognitive-processual archaeology leads directly to a valuable methodology for the identification of ritual sites and belief system (1994b: 54), but the shortcoming is that he fails to “expand his pioneering theory or continue in the same line of questioning to develop a clear methodology” (Bertemes and Biehl 2001: 13). On this basis, Robert N. McCauley and E. Thomas Lawson (2007) add the fifth way: “cognitive and psychological evidence about the mental representations of religious ritual participants” (McCauley & Lawson 2007: 217). McCauley & Lawson attempt to fill up the gap left by Renfrew by “attending to the mental representations” (2007: 213). In their explanation, the evidence of mental representations can be from both ethnographic resource and experimental resources (217). This assumption is based on the belief that the human has immutable mental modules whether in the contemporary minds or in the ancient minds (Mithen 1996). Thus, McCauley & Lawson suggest that a theoretical framework in studying religious ritual should be built on two viewpoints: the first is “modeling cognitive processes and their products;” and the second is “demonstrating their influence on religious behavior” (2007: 220).

The new century has witnessed that many scholars have contributed towards the study of the relationship between the internal mind (thought) and external representations (artifacts). Many cognitive archaeologists seem to have a consensus on this and are inclined to think that external representations are the products of the internal human mind (e. g. Anderson 2001; Boyer 2000, 2001, 2002; Donald 2009; McCauley & Lawson 2007; Mithen 2001, 2004; Tremlin 2006; Whitehouse 2000, 2002, 2004; Whitehouse & Martin 2004; Whitehouse & McCauley 2005). As Tremlin has indicated, “Religion is simply one outcome of faculties of thought common to all normal brain” (Tremlin 2006: 197). Other scholars such as Boyer (2001), McCauley and Lawson convey the same viewpoint and argue that “religious cognition is the natural outcome of common variations across a constellation of internal, domain-specific, cognitive dispositions that have evolved in the human mind” (2007: 214). McCauley and Lawson further criticize archaeologists who used to overemphasize the role of external factors but to downplay the internal cognitive equipment. They thus suggest that cognitive archaeologists must think about the

following two issues: “what kind of mind it takes to create such artifacts,” and “which is the issue at hand, deals with what such artifacts enable these minds to do” (215). They additionally point out that the major role that religious representations play is only the transmission, not production of religious ideas (214-215).

Mithen, particularly, highlights the importance of mental modularity in understanding the religious mind. In his argument, “mental modularity is one of the major issues in the study of how the mind works and how it came into being” (2001: 101). This notion manifests that the mind contains various modules. Each module has different functions and all modules are arrayed in different forms (101). For religious ideas, Mithen’s view is that “they are a product of cognitive fluidity” (109). The mind does not only stay in the brain but also extends into the material world and explores more spaces to contain the ideas. “This extension of the mind,” Mithen says, “the coupling with material objects, is essential not only for thought about supernatural beings, but for thought about all concepts that are counterintuitive – in other words, those concepts that the brain has not been designed to think about by natural selection” (110). He thus suggests that the animal and human representations in Paleolithic cave art are “not a mere supplement to the brain of one individual but an integral part of an extended mind” (110).

### **Prehistoric Art in Cognitive Studies**

Although cognitive archaeology is built upon “all those aspects of ancient culture that are the product of the human mind” (Flannery & Marcus 1998: 36), art is one of the major focuses in cognitive approaches. Art study in cognitive archaeology has different aims in the two categories: the Paleolithic period, and the Neolithic period and onward. In the former category, art study serves to explore the evolution of human cognition, language, and especially, symbolic thought. Art thus is seen as important evidence to witness the evolution of the mind from the primate to modern human and the other disciplines such as biology, primatology and psychology are integrated in the analysis of archaeological data (e.g., Donald 1991; Mithen 1996). Art study in the latter category usually aims to reconstruct past religious belief, ritual, cosmology and ideology. Ethnographical and ethnohistorical materials are often used to the analysis of

archaeological record. The belief that art and religion are the natural outcome of internal thought results in arguments of universalism.

Prehistoric art, as special artifacts in archaeology record, is often the core in the debate of prehistoric religion. Cognitive archaeologists specifically pay great attention to the relationship between art and religion. As Donald has emphasized, “Art and religion are cultural achievements that can only be understood in terms of their complex cognitive functions” (Donald 2009: 95). He holds the same view as the other cognitive scholars mentioned above (e.g., Boyer 2001; McCauley & Lawson 2007; Tremlin 2006), that is, both art and religion are virtually outcomes of “our own attempts at cognitive self governance” (Donald 2009: 95). In prehistoric societies, art is simply the material representation of religious ideas, thus its uses and themes always rely on religion. As Donald further states, “Sacred artworks intrude into daily life, keeping the mind ‘on track,’ that is, under constant cognitive regulation by the dominant worldview” (96). For this sake, art and religion constitute a reciprocal relation between each other, but usually the art plays an important subsidiary role and religion plays a dominant role. Art thus undertake to be means to transmit the thought and memory provided by social-cognitive system (97). To explain how art serves religion as one major means, Donald (2009) summarizes that art has the following features as a cognitive activity:

- 1) Art is aimed at influencing the minds of an audience, and as such, it might be called a form of ‘cognitive engineering.’
- 2) Art always occurs in the context of a distributed social network.
- 3) It is constructivist in nature, that is, aimed at the deliberate refinement and elaboration of some aspect of the worldview of the artist, which is usually derived from society.
- 4) Most art is metacognitive in function, that is, it engages in self-reflection, both individually and socially.
- 5) The form and media of art are technology-driven;

6) Neither the role of the artist, nor the local social definition of art, are fixed, and may change as a function of the state of the social-cognitive network in which the artist works.

7) Art, unlike most conventional physical engineering, is always aimed at a cognitive outcome, that is, at influencing the mind of an audience (even if the only audience were to be the mind of the artist). (pp. 97-98)

A case study of Franco-Cantabrian cave art is provided by Donald (2009). According to the above cognitive standpoints, Donald is inclined to consider the images on the cave wall as “reflections of a religious worldview;” they are “of myths and stories, archetypes and allegories, and gave human life meaning” (2009: 101).

Some scholars are more interested in how prehistoric rituals and artworks played a role in religious memory. In terms of cognitive processing, Whitehouse (2000) distinguishes two modes of religiosity: “imagistic mode” in non-literate societies and “doctrinal mode” in literate societies (2000: 1). Mithen (2004) accordingly offers an approach about the religiosity in West Asia from 20000 to 7000 BC in terms of recently discovered materials, including artwork such as the plastered skulls in Jericho, the plaster statues in Ain Ghazal, the carved stone pillars in Gobekli Tepe, and the arrays of wall paintings, sculptures in Catalhoyuk, in an aim to test Whitehouse’s model of religiosity. In Whitehouse’s model, imagistic religion involves “collective action” and “iconic imagery” which were “encoded in memory as distinct episodes, and producing highly cohesive and particularistic social ties” (Whitehouse 2000: 1). By contrast, the doctrinal mode accounts for regional and world religion, which is characterized by “the frequent repetition of both ritual and dogma” (9). Through an investigation of various arts and the other human remains such as houses and burials, Mithen (2004) concludes that the archaeological evidence from the early prehistory of western Asia appears more compatible with Whitehouse’s imagistic mode of religiosity (Mithen 2004: 38). However, Mithen feels that Whitehouse’s “dualistic model of imagistic versus doctrinal modes” is too simple and worthless to use, because “the imagistic mode would cover practically the

whole of prehistory ranging from the activities of mobile hunter-gatherers to those living in substantial towns” (38-39).

One special branch in art studies under cognitive approaches is the archaeology of images. Renfrew and Bahn maintain that among those indicators used to recognize the cult, the iconography in the symbols used, such as representations of animal, human, or mythical forms, can be much easier to prove a case for religious ritual (2000: 409). Renfrew thus calls images “special artifacts” and regards it as an important indicator as well as “special places” to identify the past ritual (1994b: 51). As he puts it, “Iconographic representation is one of the most promising routes towards the detail of some belief systems” (49). Depending on this perspective, a number of archaeologists particularly pay attention to the archaeology of images (e.g., Aldhouse-Green 2004; Crowley 1992; Hamilton et al., 1996; Renfrew & Morley 2007; Tringham & Conkey 1998). Several scholars hold the non-religious viewpoint about the production of prehistoric images (e.g., Gamble 1982; Guthrie 2005; Jochim 1983). Guthrie (2005) has compared the Pleistocene natural species and the Paleolithic images and draws a conclusion that the art production indeed reflects the natural history. Therefore, he claims that the Paleolithic artists were essentially “naturalists” (2005: 51). Gamble (1982) and Jochim (1983) both highlight the socio-ecological context. In an analysis of the geographical distribution of European and Russian female figurines, Gamble (1982) tends to conclude that the female statues were “part of the means by which social groups established and communicated the reorganized regional alliances needed for both social and ecological existence” (Conkey 1999: 304). However, the major trend still emphasizes the relationship between human and the world or spiritual world which the imagery may reflect. Douglass Bailey believes that the anthropomorphic figurines serve to “negotiate, manipulate, dictate and determine the connection between the self, the other and the world” (1996: 293). Dušan Borić (2007) explains prehistoric images based on the concept of “animality,” which was defined as animal corporeality or body, opposed to the concept of “humanity” (human consciousness and reason). Animality and humanity structured a binary composition in prehistoric societies. Prehistoric art, including animal images and

animal-human hybrid images, mediated the dualistic relation and reflects the supernatural reality concerning shamanistic religious practice, the nether world, and the experience of the body's metamorphosis (Borić 2007). For this perspective, the religious significance to imagery is still strongly emphasized in the archaeology of images. The universal understanding of a deity in anthropomorphic or zoomorphic form offer human agency for material image-making (e.g., Aldhouse-Green 2004; Hinde 2007). Because of the role that images play in human religious belief, "the use of images is widespread across the world's religions" (Hinde 2007: 326). In Robert Hinde's further analysis, the psychological processing to images is determined by such elements: belief institutions, social influence, secular myths and good news re-telling. The images are seen as vehicles to connect the human body with the mystical power (324).

There are two problems with the cognitive approach in the study of prehistoric religion and art. First, cognitive scholars are inclined to see art as the information transmitter. Culture is thus identified as "an information-processing system" (Thomas 2004: 181). Renfrew and his colleagues research how humans used symbols, but fail to explore the particular meanings of symbolic system. In other words, they pay more attentions to the function of symbols rather than the metaphorical meanings of symbols (see Renfrew 1994a, 1994b; Renfrew and Bahn 2000). In Hodder and Hutson's argument, cognitive archaeologists incorrectly assume that social values and predominant ideologies were expressed by art, because they perceive the past based on a modern social matrix (2003: 36-38). Second, based on a psychological grounding, cognitive archaeologists strictly distinguish the human mind from the outside physical world. In this way, material culture is seen as the outcome of information-processing through the human mind (see McCauley & Lawson 2007; Mithen 2001, 2004). Such a perspective is apparently built on Cartesian dualism, manifesting that cognitive archaeology "regresses to an absolute objectivity" (Hodder & Hutson 2003: 37).

It is worth noting that the neuropsychological research exploring shamanism as represented by prehistoric art, which was popularized by David Lewis-Williams and other scholars, is usually considered to fall under the general category of cognitive



archaeology (e.g., Clotte & Lewis–Williams 1998; Lewis–Williams & Dowson, 1988, 1993). However, I will specially examine this theory in the section “Shamanism and the Archaeology of Shamanism.”

### **Symbolism and Structural Archaeology**

Symbolism in archaeology is a broad concept that covers “cognitive structures,” “ritual icons,” “identities such as gender, prestige, and ethnicity,” “technological knowledge,” and “political ideologies” (Robb 1998: 329). Symbolic archaeology not only sees iconic imagery as symbols but covers broad material phenomena which carry meanings invested by humans (Hodder 2005; Robb 1998). Studies of symbols run through the whole history of archaeology, but different approaches have different theoretical and methodological understandings. In the cultural historical period, archaeologists concentrated on the identification of cultural and ethnic variations (Trigger 2006: 232-241). Therefore, the styles of cultures were seen as symbols because “they ‘represented’ social or ethnic groups”. The functions of artifacts were made the primary focus, but the symbolism of artifacts was less explored (Hodder 2005: 190). Symbols in processual approaches are vehicles to convey information. Although they are representations of meaning, they seem to “have a material life” (Robb 1998: 332).

Postprocessual archaeologists have disagreed with the processualist idea that “material culture reflects human behavior in adapting to environment” (Hodder 1982c: 11) and hold that “material culture is meaningfully constituted” (Hodder 2000: 87). In Hodder’s idea, the term “symbolic meaning” indicates “the secondary references evoked by the primary meanings” (1982c: 11). Hodder further suggests the manipulation of material cultures as “text” (Hodder 2005: 190), because human action always conveys a message (Hodder 2000: 87). For this reason, Hodder evokes semiotics — a structural approach — for the study of material cultures (Hodder 2005: 190).

Structuralism is built on the study of “the connectedness and the constructedness of human meaning” embedded in material culture in terms of the principles of linguistics

(Conkey 1989: 138). For classical structuralists in the 1960s and 1970s, it is the relationships of structures in things, not the things themselves, which constitute the nature of things. Therefore, the universalism of structures is centered in structuralist approaches (138). Because of this universal perspective and its methodological similarities with systems analysis which has been favored by processual archaeology, structuralism has been rejected by postprocessual archaeologists. Postprocessualists rely on the theory of practice and highly stress aspects of social action and historical meanings (Hodder & Hutson 2003).

In this section, I will give an overview of how structuralists develop the semiotics theory to interpret material culture and how the theory of practice has been built and practiced in postprocessual archaeology.

### **Structures, Cultural Systems and Grammatical Principles**

Structuralism initially derived from the linguistic approach of Ferdinand de Saussure (1857-1913), but was later extended to non-linguistic areas and now has a broader sense (Pettit 1975: 1). According to Wylie (2002), it is Pettit's *Concept of Structuralism* (1975) that caused the systematical structural framework to manipulate material cultures with a linguistic concept – semiology. In this way, archaeologists can conceive of the material remains “in semiological terms,” in some way as the linguists treat sentence structures (Wylie 2002: 127). This perspective inspired many archaeologists in the 1970s and 1980s (e.g., Conkey 1982; Friedrich 1970; Glassie 1975; Leroi-Gourhan 1982; Washburn 1983a) to explore “how symbols constituted and structured the mental and social world of ancient people” (Robb 1998: 334-335).

Ferdinand de Saussure is widely regarded as the father of modern linguistics and contemporary semiotics. Saussure's most important work, *Course in General Linguistics*, was published in 1916, after his death<sup>2</sup> (Saussure 2011[1916]). The study of linguistics in the years before Saussure mainly focused on the construction of comparative grammars in a historical approach. But Saussure's proposal ceased this historical tradition and

---

<sup>2</sup> Saussure's *Course in General Linguistics* was not his original writing, but a text constructed by his students in terms of their notes in his lectures (see Sturrock 2003: 27).

demonstrated that language could be studied scientifically by seeking general laws (Preucel 2006: 21). This “structural linguistics” holds that languages are superficially accidental and variable but under the surface has deep structures including “rules, grammar, and models” (93). The major issues in linguistic structuralism and semiology include: “the distinction of *langue* (language) and *parole* (speech); the arbitrary character of the sign; the notion of difference; the constitution of the sign through the conjunction of signifier and signified; and the separation of synchrony and diachrony” (Giddens 1979: 10).

Claude L'évi-Strauss (1908-2009) and Roland Barthes (1915-1980) (1968, 1972) were the pioneers to introduce Saussure's linguistic approach into social science, and the structural model therefore spread rapidly to the studies of various cultural and social phenomena in the 1970s and 1980s (Preucel 2006: 94). Levi-Strauss started to use structures in an analysis of social phenomena (1969 [1949], (1963[1958], 1966[1962], 1983[1964], 1990[1966], 1990[1968], 1990[1971]). For L'évi-Strauss, “A myth, a philosophical thought, a scientific theory - these not only have a certain content but are also determined by a definite logical organization” (Broekman 1974: 4). As Anthony Giddens has noted, “a number of Saussurian themes are prominent in L'évi-Strauss's writings” (1979: 18). They include

the priority of the collective and universal over the individual and contingent; an emphasis on the relational at the expense of the isolated unit; and acceptance of the application of the sign to non-linguistic phenomena: that is, the programme of semiology. The implication of the latter point, as constructed by L'évi-Strauss, is not just that concepts employed by linguistics can be applied to the study of social and cultural phenomena; but that these are phenomena whose inmost nature is the same as that of language. (Giddens 1979: 18-19)

In L'évi-Strauss' viewpoint, communicative exchanges dominate a variety of areas in human culture such as kinship, myth, and language, and these exchanges are expressed

by “a relatively small set of basic forms” or “deeper structures” (Moore 1997: 212). Lévi-Strauss thus holds that culture has a universal nature, because it relies on the symbolic expression which is deeply “rooted in the subconscious properties of the human mind” (Moore 1997: 212). This standpoint of universality, to some extent, accounts for the processual emphasis in which archaeologists seek the common laws, rules, and codes in cultural systems which are seen as survival strategies to adapt to the environment (Hodder 1982b). Structuralism thus provides archaeologists a new way to understand material culture: “At least some aspects of which must be understood as meaningfully constituted and, in that sense, semiological” (Wylie 2002: 130).

Philip Pettit (1975) first proposed that structuralism can be practiced in archaeology. He points out that things in material remains contain structures which are analogous to sentences in which they can also encode or produce meaning like written real language. As he says, “It is not sentences themselves which are treated on the linguistic model of the sentence but things like sentences – menus and outfits for instance” (1975: 42). Pettit terms three areas considered to match the structures in sentences: the literary arts; the non-literary arts such as music, architecture and painting; and the customary arts such as fashion, cuisine, and so on (Pettit 1975: 42). Because linguistic expression is directly linked to the cognitive capacity in the human mind, Edmund Leach suggests that the objects in the archaeological record should be seen as intentional beings determined by the mind (1973: 763-764). Whether for Leach or for Lévi-Strauss, “structure is an ideal order in mind and it is an internal logic;” it often “appears to lie outside the human mind” (Hodder 1982b: 7).

Many archaeologists such as Leroi-Gourhan (1965, 1968, 1982, 1986), Conkey (1982, 1985, 1989), Friedrich (1970), Glassie (1975), and Washburn (1983a) have contributed to the structural view of material cultures since the 1970s. An influential example of structuralism is from Glassie (1975), who offers a structural approach to an analysis of Middle Virginian folk housing. In his study, Glassie reveals that the architectural design of the houses was dominated by some linguistic-like structures. Like other structuralists, Glassie highlights the role of rules which unite different elements into

an integrated system of architectural construction in the same way as the rules in a particular grammar generate the language. Just like the generation of a language which is governed by the linguistic competence, the design of architecture is dominated by “the architectural competence” (1975: 21). These architectural rules include “forming the base structure,” “extension,” “massing and piercing the extended form,” “expansion backward,” “massing and piecing the backward expansion,” “expansion upward,” “massing and piercing the upward expansion,” “roofing,” and “subtypification” (21-40). Glassie also uses the archaeological term “type” to call the artificial grouping of features. Seventeen basic types are identified, manifesting relations between structures. According to the analysis of the types in grouping, Glassie further points out that “the rules are unconsciousness” and “structure the separate into the systematic” (35). He negates that the system is a broken series of structures, and holds that a structure binds all parts as a whole. As he puts it, “All of the rules of the gross architectural system control only relations” (38). In this way, Glassie “seeks to disembed underlying cognitive and cultural principles that...capture the intelligible structure of the surviving fragments of an architectural tradition, giving them coherent explanatory form and meaning” (Wylie 2002: 133).

Generally, the aim of Glassie’s examinations of Middle Virginia folk housing is to propose a theoretical model to deal with artifactual competence by revealing the artifactual “grammar.” In his argument, artifacts produce information from the human mind because “culture is patterning in mind” (Glassie 1975:17). The external context works through the internal competence by negotiating, yielding ability in consciousness to output sentences or material culture, both of which are patterned with words and grammars. He thus concludes that “Speech and artifacts are both expressions of culture” (17).

Friedrich’s structural approach focuses on how information about social interaction is encoded in vessel decorations through the design structure. His ethnographic analysis of pottery painting patterns in San José a Mexican village shows that the painting style should be seen as “a complex, multi-dimensional, hierarchically

organized structure” (1970: 342). His examination reveals that design structures always mediate the relation between the patterning of artisan’s ideas and the patterning of decorations on ceramics (342). In Friedrich’s analysis, a structure representing the painting style includes two aspects: a hierarchically organized system which determines the divisions of painting zones and design elements for being used into more complex planning. Friedrich specially stresses the importance of design structure because it exhibits that stylistic variables can be seen “as an indicator of pattern of social interaction” (333). Friedrich’s observations of San José painting activities demonstrate that the decoration strategy is often shared by painters and the painters learn design configurations from each other. A painter may simply absorb the borrowed configurations in his/her personal design features. Friedrich then shifts to an analysis of the vessel decorations in archaeological materials; he discovers that the interaction between painters, which is indicated by the utility of patterns of variation, can also be shown in the past painting styles. “[T]he phenomenon can be easily seen by comparing the way in which various painters render the same designs” (340). In his conclusion, Friedrich emphasizes the exploration of systems in understanding the encoding information exhibited in the patterns of social interaction (342). His approach manifests that structuralists have similarities with processual archaeologists because they both are concerned with systemic aspect of material cultures (Hodder & Hutson 2003: 46).

The exploration of a cultural system by studying grammatical principles embedded in structures of artistic designs is fully represented by the volume, *Structure and Cognition in Art*, edited by Dorothy Washburn (1983a), in which several archaeologists draw particular attentions to building a theory of structural style in prehistoric and recent indigenous art (e.g. Hardin 1983; Lanthrap 1983; Washburn 1983b). Different from other structuralists such as Glassie (1975) and Friedrich (1970), Washburn (1983b) is concerned with the identification of the symmetry rules in her investigation of pottery designs from Neolithic Greece and the Aegean. Her paper represents two test cases in revealing variations of pattern structure throughout time and space. The first test is focused on the temporal changes of pattern structure over a period

of 3000 years in the site of Knossos. The second test is the symmetry analysis of the decorated ceramic vessels on the Neolithic sites on mainland Greece, revealing that the forming of similarities or differences in art design structures is evidently based on geographical and economic factors. In both test cases, symmetry analysis is used in examining the systematic nature of cultural pattern. As the method in this paper, it “involves use of the principles of symmetry to describe the motions which generate a repeated design” (138). Four motions are indicated; they are translation, rotation, mirror reflection, and slide reflection. Washburn’s paper is thus concerned with “classification by the symmetry of the repeated patterns” which focuses on design structure rather than the motifs (140).

In the analyses of myth and the other areas of human cultures, Lévi-Strauss has discovered a “binary structure” beyond the cultural surface, which are always constituted by a pair of opposite notions such as sky/earth, earth/water, up/low, east/west, nature/culture, land/sea, inside/outside, day/night, sun/moon, raw/cooked, man/god, near/far, and the like. These binary notions dominate the cultural structures which reflect the human mind (Lévi-Strauss 1963[1958], 1966[1962], 1969[1949], 1983[1964], 1990[1966], 1990[1968], 1990[1971]).

In the 1960s, Leroi-Gourhan (1965, 1968) started to use the binary structure model to “read” the European Paleolithic cave art. He found images and geometric forms were deliberately selected and sets of structural principles were probably used in image-making. His structural analysis also shows that whether human or animal imagery both can be categorized into two sexual domains: male and female. He believes that the schema of image-making in cave art is virtually encoded by this gender structure principle instead of the magic hypothesis (Leroi-Gourhan 1965, 1968, 1982, 1986). In Leroi-Gourhan’s observations, there are two central paired motifs which are represented by human and animal images in cave art: woman/man and bison/horse. The bison/horse (or ox/horse, reindeer/horse) is considered to correspond to the woman/man dichotomy. He thus proposes that there is fundamental “figurative system and the underlying ideology” which are governed by the gender principle (1965: 150). Leroi-Gourhan further

arbitrarily groups the geometric signs into two gender-oriented categories: the female signs and male signs. The former indicators consist of triangles, rectangles, lattices, tectiform signs, ellipses, claviform signs, and brace-shaped signs. The latter indicators include barbed signs, short strokes, and dots. He claims that these geometric signs frequently appear in pairs such as an ellipse with a barbed sign, a rectangle with rowed dots, and a triangle with grouped strokes. A systematic arrangement of painting motifs is hence assumed to be practiced by the Paleolithic ancestors (144-148). Leroi-Gourhan also attempts to demonstrate that bison and horse, which most frequently appeared on the cave walls, are not human game. This conclusion constitutes a challenge to the theory of sympathetic hunting magic which have been prevailing for a half century in symbolic archaeology (Conkey 2001: 280; Leroi-Gourhan 1965: 172-174). For Leroi-Gourhan, the binary structures of human figurines, animal figurines, and geometric signs reflect the Paleolithic European cosmology which resembles the old Chinese cosmological principle: *yang* and *yin* (1965: 174).

The painted and engraved cave walls, to Leroi-Gourhan, were thus mythically, but not magically, constructed. He considers the imagery as a system of signs which bear a message “whose elements (frame and figures) occupy the position chosen by the author of the figures” (Leroi-Gourhan 1986: 9). The configuration of cave paintings and engravings must be governed by “a certain syntax” (10). Based on this assumption, Leroi-Gourhan takes a Bronze Age figurative theme from Middle East, which includes images of eagle, lion, and bull, as an example, to speculate that European cave art actually displayed the structure of Paleolithic mythogram as a “mythographic vessel” (16). A further statistic analysis has been conducted in his 1966 paper which was translated into English in 1986 (1986). He generally divides the over 2,000 figures into two groups: first are animals and second the group consists of geometric signs, human shapes, and stenciled hands. Among animals, bison (oxen) and horses, in roughly equal numbers, comprise seventy percent of the total species depicted. The number of mammoths and ibex occupy twenty percent and the remaining ten percent are deer, felines, bears, rhinoceros, and other rare species. Except for indentifying human figures



as male/female, when dealing with the second group of figures (human shapes, geometric signs, and stenciled hands), he arbitrarily divides the signs into “full” signs and “thin” signs in terms of their forms; the former, including ovals, triangles, rectangles, is considered to account for femaleness, and the latter consists of straight, hooked and branched lines and series of dots, perhaps showing the nature of maleness (1986: 12). That is to say, in Leroi-Gourhan’s argument, the geometric signs are “multiple variants of sexual symbols” (12). For the stenciled hands, Leroi-Gourhan puts them in the basket of “full” signs (13).

Tilley (1991) endeavors to reveal the structural logic from the Bronze Age rock art in the Nämforsen region of southern Sweden. He sees material culture as a overall structural system which embodies paradigmatic series and syntagmatic chains like language. Except for human figures, Tilley divides the six frequently occurring designs on rock into two groups. One group comprises the elk, the fish, and the bird, implying their associations with nature, whereas the other group comprises the shoe sole, the boat, and the tool which may symbolize aspects of culture. Tilley assumes that the three designs in each group have a logical connection with land, water, and sky. In the natural series, the elk is connected with land and the fish with water, but the bird can be connected with all aspects of land, water, and sky. Much like the natural series, cultural series has same logical connections; they are the shoe sole with land, the boat with water, and the tool with land, water, and sky. Each series of motifs hence governs the structural designs in Nämforsen rock art (1991: 99-100). Among these paired oppositions, in Tilley’s observations, the most frequent motif is the dualism of elk and boat, which often occur in a same panel. Most elks were not indicated with antlers, and Tilley thus suggests that they may signify “a female principle” (102). On the contrary, in Tilley’s description, “all boats possess a naturalistic or simplified elk head,” implying the male nature of boats (103). Tilley hence hypothesizes that the relation of the elk and the boat virtually represents a sexual relation: female and male (102). A set of oppositions potentially reflected by Nämforsen’s rock art has been listed (105):

elk : boat  
land : water  
nature : culture  
inside : outside

When studying the Iron Age settlement at Sollas, Scotland, Campbell (2000) has noticed that sheep and cow remains constituted a pair of structural patterns in burial pits: the sheep was usually inhumed but the cow was cremated. The relation between sheep and cow naturally accounts for a dualism: water/fire. However, when sheep and cow were consumed as food, the sheep was most often roasted but the cow was boiled. The sheep/cow relation is opposite to that in burial and account for fire/water. Campbell thus draws a conclusion that these behaviors represented human cosmology which might be structured by such binary oppositions: life/death, fire/water, and above/below.

Robert McGhee (1977) has presented a structural analysis of Inuit technology in Alaskan and Canadian Thule culture. He does not confine himself only in the exploration of the binary structure of the material culture, furthermore, he connects his observation of structures in prehistoric technology with studies of cultural context such as Inuit mythology, rituals, customs, and seasonal changes of life styles which have been recorded by ethnographic literatures. His initial observation of Thule culture shows that ivory and sea mammal bone were used to make harpoon heads and other gear for sea mammal hunting, such as snow goggles, kayak mountings, and dog trace buckles. Bird hunting equipment such as arrows, dart prongs, and bolas balls, were also made of ivory or sea mammal bone. Ivory was manufactured for women's gear which includes sewing tools, needle cases, thimble holders, ulu handles, combs, pendants and chains, and bird-woman figurines. Ivory was never the material to make arrowheads for land animal hunting (such as the caribou). The arrowheads used for men's summer caribou hunting are only made of antler. Several groups of artifacts are then grouped by McGhee as follows: hunting equipment for sea mammals (ivory and sea mammal bone); hunting

equipment for birds (ivory and sea mammal bone), winter tools for sea ice (ivory); women's sewing tools, ornaments, and bird-women figurines (ivory); and arrowheads for land animals hunting (antler). According to his analysis of the contextual associations of these several groups of artifacts, McGhee suggests that "an explanation may be found in the symbolic attributes of these materials in the minds of Thule people" (1977: 145). Thus, a set of dichotomies can be detected as following: land/sea; summer/winter; man/woman; and antler/ivory.

McGhee (1977) attempts to find more evidence from Inuit customs, taboos, and mythology to demonstrate the existence of dual structures in Thule societies. The dual structures are centered on a fundamental binary concept: land/sea. Cooking caribou meat and sea mammals in the same pot was a taboo. The two even could not be eaten on the same day. Women could not sew caribou skin on the sea ice, and caribou skins could not be taken into the interior in the caribou hunting season. They only used caribou blood, but not seal blood, as glues for manufacture of tools for caribou hunting. The close relationship between women and birds and between women and sea mammals can be found in historic Inuit mythology. A widespread Inuit myth described a story in which the seals and whales were created by a woman deity living at the bottom of the sea. Another story is about a male deity, the moon, who is a pastor of herds of caribou, signifying the association between men and caribou. Hodder (2003: 58) has noticed that, if the contextual studies are introduced into structural analysis as what McGhee has practiced, the structural archaeology "has the potential for rigour."

McGhee's example implies that structural analysis must combine "the assigning of meaning" (Hodder & Hutson 2003: 58). However, identifications of symbolic meanings constitute a problem in most structural approaches. It is quiet often that structural analysis is developed without a clear identification of the meaning contents of symbols. Tilley's hypothesis of the binary oppositions between elks and boats is based on his identifying the geometric sign, which often coexist with elks, as boats (1991: 27-28). What we have to admit is that the so-called boat icons are abstract and ambiguous. We have no certainty of confidence to identify the design to be a boat. If we are random like Tilley, in

Hodder's argument, we may think it may be also considered a sled. If the design is originally a sled, then the hypothesis of the land/water binary opposition will lose favor of data, because the sled is not associated with water like a boat is (Hodder & Hutson 2003: 54). Leroi-Gourhan's binary structures have the same problem. First, he fails to provide a satisfactory interpretation about why the "full" geometric designs correspond to females while other "thin" signs correspond to males (Conkey 1989). Second, it is hard to understand why the bison symbolizes the female while the horse is the symbol of male. Third, although Leroi-Gourhan connects the symbols with mythographic aspect (1986: 16), his general approach fails to offer a "query into why this particular kind of structural mythogram might have been meaningful to these particular makers-users-viewers" (Conkey 1989: 145). In Hodder's argument, Leroi-Gourhan's inadequacies actually "derive from the general limitations of the structuralist approach and the limited information he had about the Paleolithic" (Hodder & Hutson 2003: 57). Moreover, structuralists such as Washburn (1983b) even do not practice the assigning to meanings of motifs. In her symmetry analysis of ceramic design, Washburn concentrates on the investigations of design structures, their relations to cultural patterning, and the grammatical principles of material culture, but completely avoid any examination of symbolic contents. This method of system interpretations actually accounts for the positivist tradition which was favored by functionalism (Hodder & Hutson 2003: 50).

Additional problem in structural approaches is the methodology to equate material culture with language. As Hodder has pointed out, "Objects of material culture are not arranged in a linear, narrative sequence in the sense of words arranged in a sentence. Also, an object can be seen both as an object, the result of processes of production and action, and as a sign, since the object (pot) can itself be the signifier for other concepts" (2003: 60).

Despite the unambiguous limitations and problems in structural archaeology, Hodder is still confident in structuralism if it is used to construct the relation between domestic and wild which is associated with relation to inside/outside settlement (2003: 59). From this perspective, he has proposed a structural approach for studying European

Neolithic cultures (1990). In his monograph, *The Domestication of Europe*, Hodder (1990) has revealed that how “a long-term structure” ruled “architectural form,” “artefactual style,” and “funeral rites” in the European Neolithic (Thomas 1996: 97). In his analyses of the Neolithic settlements, Hodder has identified a series of binary oppositions which underlie human behaviors. These dualist elements include: back/front, west/east, dark/light, death/life, wild/domestic, male/female, and so on (Hodder 1990: 27). Among these oppositions, the most evident dualism is between the *domus* (home) and the *agrios* (the wild). In his argument, the opposition of home/wild is equivalent to culture/nature. As he emphasizes, “the *domus* provided a way of thinking about the control of the wild and thus for the larger oppositions between culture and nature, social and unsocial” (39).

However, Hodder’s *domus/agrios* hypothesis has a similar problem as other structural works, which underestimate historical aspect. In Robb’s words, Hodder has proposed “the coherent nature of his cultural structures” and “an unchanging script inaccessible to actors” (1998: 337). Thomas (1996) is skeptical of whether or not Hodder’s work can be identified as a postprocessual approach because he feels that “Hodder’s vision of a structure of meaning which determines thousands of years of prehistory, is questionable” and that “meanings are unlikely to maintain this degree of stability over time” (Thomas 1996: 97).

Hodder shows a contradictory attitude to structural perspectives. On one hand, he is aware of the problems such as the lacking of meanings and the structural incomparability of material culture and linguistic. On the other hand, he is inclined to use binary structural methodology to interpret cosmological meanings potentially embodied in material cultures (1990, 2003). However, some archaeologists strongly question the dichotomy between material and ideal, or culture and nature (e.g., Barrett 1994; Gosden 1994; Thomas 1996; Tilley 1993). They are inclined to eliminate the demarcation between internal and external, body and soul, home and wild, or inside and outside. This arbitrary dualism is believed to mislead archaeologists when they deal with symbols and structures (Robb 1998: 337). Thomas (1996), for instance, argues that the binary relations such as culture/nature and mind/body fully guide scholars to a wrong way to study

material culture (Thomas 1996: 18-20). Cultural practices demonstrate that ancient people did not simply move things from the natural world into the cultural world, but instead, “it is a means of entering into the network of relationships which obtains between bodies and materials, and into the creation of meaning” (19). It is a mistake for us to clearly distinguish thinking from action, because the body and the world are interwoven and inseparable. Thus, Thomas concludes that cultural knowledge cannot be viewed as a fixed code or underlying structure, because it is “fragmentary, incoherent and self-contradictory,” rather, it “may represent meaningless tools for thought and social engagement, used contextually in the production of meaning” (20).

### **Structures, Practice, and Postprocessual Archaeology**

For Giddens (1979) and Bourdieu (1977), the primary problem in structural archaeology is its ignorance of the theory of practice. As Hodder has described, “There is little room for agency” and thus “The individual is passive” (2003: 61). Structuralism provides a way for us to know “How pattern is generated” but it fails to explain “How we make relevant use of structures in constantly changing situations” (Hodder & Hutson 2003: 90). Thus, both Bourdieu and Giddens develop

theories of practice or social action, called by Giddens ‘structuration,’ in which there is a recursive relationship between structure and practice. Bourdieu’s account is of particular relevance to archaeologists because he develops his theory in relation to material culture and the use of space. Indeed his ideas have been applied in ethnoarchaeology by, for example, Donley (1982), Moore (1982), and Braithwaite (1982), and in archaeology by Barrett (1981) and Davis (1984). (Hodder & Hutson 2003: 90)

The notion of *habitus*, a term first proposed by Marcel Mauss, is at the core of Bourdieu’s practice approach (Hodder & Hutson 2003: 90). *Habitus* in Bourdieu’s context is regarded as the mediation between structure and practice (Bourdieu 1977). Bourdieu sees *habitus* as “a linguistic, physical and cultural competence” and as “practical logic and

knowledge,” rather than seeing it as “abstract sets of mechanistic rules” in the mind (1977: 91). The human relies more on flexible skills and concrete competence rather than the static and universal rules to live their everyday life (91). “Regular patterns of behavior occur as a result of practices generated through habitus, not through norms or rules” (91). In Preucel’s words, “practices cannot be deduced from the social conditions underlying their production” (2006: 132). Hodder thus emphasizes that Bourdieu’s practice theory manifests the importance of history, “because it links social practices with the ‘culture history’ of society” (2003: 92). As Bourdieu (1977) describes for us:

In practice, it is the habitus, history turned into nature, i. e. denied as such, which accomplishes practically the relating of these two systems of relations, in and through the production of practice. The ‘unconsciousness’ is never anything other than the forgetting of history which history itself produces by incorporating the objective structures it produces in the second natures of habitus. (Bourdieu 1977: 78-79)

In short, the habitus, the product of history, produces individual and collective practices, and hence history, in accordance with the schemes engendered by history. The system of dispositions – a past which survives in the present and tends to perpetuate itself into the future by making itself present in practices structured according to its principles, an internal law relaying the continuous exercise of the law of external necessities (irreducible to immediate conjunctural constraints) – is the principle of the continuity and regularity which objectivism discerns in the social world without being able to give them a rational basis. (Bourdieu 1977: 82)

The habitus is the product of the work of inculcation and appropriation necessary in order for those products of collective history, the objective structures (e.g. of language, economy, etc.) to succeed in reproducing themselves more or less completely, in the form of durable dispositions, in the organisms (which one can, if

one wishes, call individuals) lastingly subjected to the same conditions, and hence placed in the same material conditions of existence. Therefore sociology treats as identical all the biological individuals who, being the product of the same objective conditions, are the supports of the same habitus: social class, understood as a system of objective determinations, must be brought into relation not with the individual or with the “class” as a population, i.e. as an aggregate of enumerable, measurable biological individuals, but with the class habitus, the system of dispositions (partially) common to all products of the same structures. (Bourdieu 1977: 85)

Habitus is thus seen as historical and active in social action. In another monograph, *The Logic of Practice* (1990), Bourdieu describes habitus as “the embodied history” or “internalized” nature, which serves as an active presence through human past (1990: 56). Therefore habitus occurs spontaneously and never involves human will. When pondering the relation between habitus and homogeneity, Bourdieu stresses the active role which is played by individual systems of dispositions. Diversity is included in homogeneity, that is to say, homology of worldview embodies the individual differences while uniting diversities of singular habitus into a same system. Individual history does not differ from collective history but the particular presence of collective history (1977: 86; 1990: 58). In Bourdieu’s words, “Each individual system of dispositions may be seen as a structural variant of all the other group or class habitus” (1990: 58).

In terms of Bourdieu’s perspective, Giddens proposes his “duality of structure” concept, “which relates to the fundamentally recursive character of social life, and expresses the mutual dependence of structure and agency,” which means that “the structural properties of social systems are both the medium and outcome of the practices that constitute” social systems (Giddens 1979: 69). Accordingly, structure can be understood as production of practice, but not a static concept to social action. Structures not only produce personality but also society. Social action never has intentions and conditions. Every moment action happens naturally and simultaneously all action coexists in historical continuity (70). Actors in the production of interaction play a vital



role in governing rules and resources. The relation between moment and totality in the theory of practice is different from the relation between parts and wholes in the functionalist theory, and the former reflects the presence of time and space but the latter overestimates time and space. Presence and absence of time and space constitute a dialect involving the structural properties of the overall social system (71).

Hodder notes that Bourdieu's theory of practice sheds a light for archaeologists to understand material remains by exploring the principle of practices. In this way, archaeologists may "read" the material culture as they would read books (Hodder & Hutson 2003: 93). Archaeologists hence may see all archaeological artifacts, such as pots, bones, pins, and door-frames, as the production of enculturation, which combine to constitute the social world (94). In Giddens's "duality of structure," the structures are "both the medium and the outcome of the practices" (1979: 69). Therefore, the individual is creative because of "degrees of competence," and material culture may also be seen as active in creating society and creating "continual change" (Hodder & Hutson 2003: 94).

Inspired by the theory of practice, postprocessual archaeologists draw attention to the active and creative role of symbolic systems embedded in material cultures (e.g., Barrett 1994; Hodder, 1982a, 1982b, 1982c, 1989, 2000; Shanks & Tilley 1982, 1987, 1988; Thomas 1996; Tilley 1989, 1999). Hodder (1982c) has realized that the way that humans treat material culture is directly influenced by human ideas which are produced in social life. Because "material culture was meaningfully constituted" and "the conceptual meanings were at least partly arbitrary," he suggests that we must study material culture "contextually" (Hodder 2000: 88). Here, Hodder defines context as "the totality of the relevant environment." He clarifies, "The context of an archaeological 'object' (including a trait, a site, a culture) is all those associations which are relevant to its meaning" (Hodder 2000: 89). Accordingly, archaeologists must understand the active role of material culture and historical rules in social action (Hodder 2000: 89-90). A historical and social concern in material culture is hence at the core of the postprocessual approach. In Conkey's (1989) words, "There is movement away from structuralism to a structural analysis that can elucidate how structures 'make sense' in particular historical

contexts of social action” (Conkey 1989: 152). Material culture is understood as a “manifestation of structured symbolic practices meaningfully constituted and situated in relation to the social” (Tilley 1989: 188). This relation should be seen as active but not passive. Tilley (1989) writes,

- 1) Material culture is a framing and communicative medium involved in social practice. It can be used for transforming, storing or preserving social information. It also forms a symbolic medium for social practice, acting dialectically in relation to that practice. It can be regarded as a kind of text, a silent form of writing and discourse; quite literally, a channel of reified and objectified expression.
- 2) Although material culture may be produced by individuals, it is always a social production. This is because it does not seem to be at all fruitful to pursue a view of the human subject as endowed with unique capacities and attributes, as the source of social relations, font of meaning, knowledge and action. (pp. 189)

An insight is obtained: particular context rather than universal structures should occupy a prominent place in archaeology (Tilley 1989: 188). One of the major problems of structuralism is that it equates material culture with language and text. Instead, postprocessual archaeologists argue that symbols in material culture never express meanings arbitrarily, like spoken words. Unlike linguistics, the symbolic meanings of objects are more ambiguous and implicit in social actions, since the structures are always in use (Hodder 2005: 191; Preucel 2006: 135). Shanks and Tilley’s work *Social Theory and Archaeology* (1988) indicate that the encoded sign system in material culture is much different from that in linguistic text, because “it does not simply reflect the significative structures of language in another form” (1988: 101). Shanks and Tilley vividly compare material culture to “a spiralling matrix” fulfilling paradigmatic relations “involving parallelism, opposition, linearity, equivalence and inversion between its elements.” In the following discussion, they make another metaphor: the form of social relations can be compared to a grid. “The signifying force of material culture becomes inserted” into this

grid by extending, defining, redefining, bolstering or transforming (Shanks & Tilley 1988: 103). Thus, they suggest that material culture must be conceived of as symbolic production which is “part of the social constitution of reality” (105) rather than “an individual creation” (117).

A number of archaeologists have contributed to the symbolic study in which material culture is envisioned as active production of social life (e.g., Braithwaite 1982; Miller 1982, 1985; Shanks & Tilley 1982, 1987; Shennan 1986). In his study of Indian Dangwara pottery, Miller (1985) sets up a symbolic framework in which the potteries are categorized according to forms, colors, and functions, and are related to the coding system. His framework connects art structures, meanings represented by symbols embodied in ceramics, and creative social actions. A set of categories are considered as structural patterns, in which three levels are grouped: “that of the individual pot as representative of a category, that of the pottery categories as constituent elements of a pottery code, and that of a grid in which pottery as code was related to all other codes” (1985: 201). Here, the variability appears to be “an essential property of categories” (202). Such variability implies “the heterogeneity of the social context” and the pottery thus is polymerous in its meanings (202). Structures in the social system thus have dual properties (see Giddens 1979); they are not only the medium of but also the outcome of practices, involving temporal, spatial, and social context. Miller’s approach demonstrates an archaeological shift from a purely formal analysis to examinations of meanings and social context. The pottery variability also indicates that the social classification may be represented by pottery in terms of dualities “between wealth and ritual status” or “between formal and informal action” (Miller 1985: 202). Miller’s research illustrates that archaeological artifacts may come to be seen as “an enabling structure” and material forms may be seen as “part of the central order of cultural construction” (205).

Postprocessualists still have a special affection for the analysis of binary structures. Different from the early structuralists, postprocessualists are keen on combining the study of dualism with social action, illustrating that their approaches are strongly drawn from Bourdieu’s and Giddens’s practice theory instead of the singular

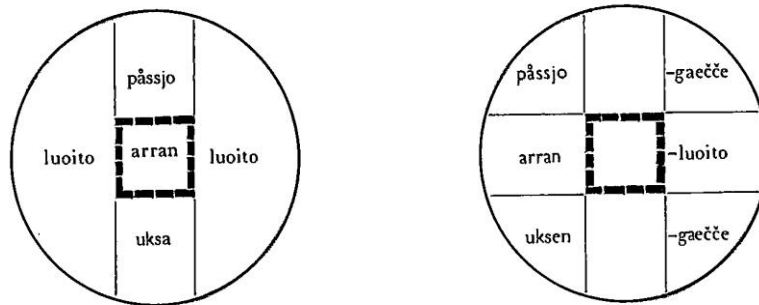
linguistic tradition of Saussure. The basic problem in classical structuralism, for example, is that binary analysis does not involve “the fundamental variables of archaeological inquiry such as time, place, ecology, or artifacts, that is context” (Conkey 1989: 145).

A close observation of Azande society in southern Sudan enables Mary Braithwaite (1982) to conduct an ethnoarchaeological study of pottery decoration based on social context. The division of men and women constitutes a major characteristic of Azande society, and this division also dominates the Azande system of symbols and social practice. Azande is an egalitarian society between men and women. In Azande society, men undertake the responsibility to make pottery while the produced clay pots are owned and used by women. Usually each woman has ten pots and every pot is allowed to be used for one purpose; they are cooking pots, water pots, beer-making pots, and beer-serving pots. It is taboo for men to enter a woman’s kitchen hut where the woman’s pots are kept. There is also a spatial separation between the genders. In the same homestead, men and women eat in different spaces. Social division by sexes is the other striking feature in Azande society. Men are hunters of wild animals and workers of cash crops such as bananas, cotton, coffee and pineapples, while women are the workers of crops for home use, such as various seeds, beans, vegetable, and root. Even if both men and women share the same work, the division of sexes is still carried out seriously. Both men and women fish but they use different methods and equipment. When both men and women from the same family work in their own fields, they work by separate plots.

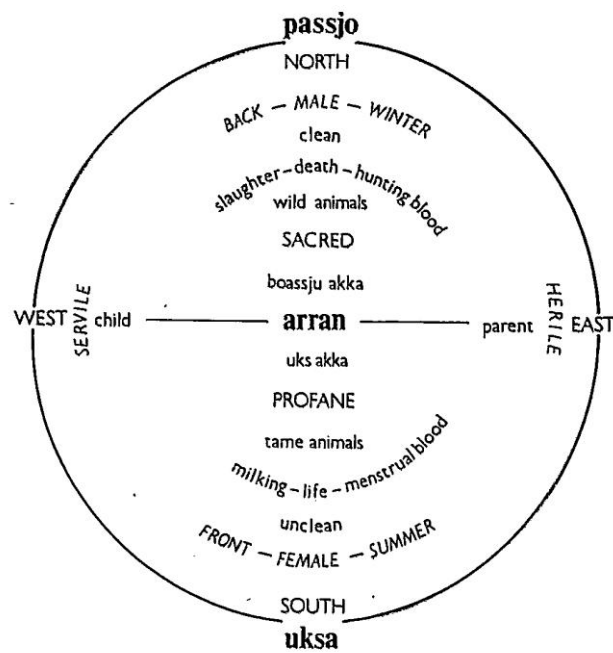
Food in Azande society is encoded with information which symbolically expresses social relations, and the duality of male and female roles involves the use of food and the pot. The beer pot, for example, is usually served by women but is transferred from women to men. The cooking pot is encoded with information related to the dichotomy of the raw and the cooked. The water pot can be used by both men and women only after it is taken out of the kitchen, the female area. All of these three types of pots are decorated with incised bands. The only pot used by men and kept in the man’s hut in Azande society is a small porous water pot containing cool drinking water. This

type of pot is used by men but kept full by women (the man's wife or daughter), and is "not seen" by the public (Braithwaite 1982: 84). In Braithwaite's explanation, the pot has no need to be marked therefore no need to be decorated. These actions demonstrate that "female and male, women and men, and raw and cooked are of particular social and symbolic significance in Azande life" (85). Pot decoration functions to "facilitate encounters between opposed categories and to authorise the breaches of the social and symbolic order inherent in the use of the objects concerned" (85-86), but specially used "as a symbolic and ritual marker of particular areas of ambiguity and concern brought about by the actions of people in the course of everyday life" (87). Braithwaite's argument interprets how the symbolic meanings of pottery decoration emerged in the social actions and symbolic systems that were produced through the use of objects in everyday life. Symbols not only have competence to communicate, but also to guide and effect human action across time. Braithwaite thus realizes the active role of objects and sees objects as agency in societies. She posits, "Decoration art is not merely some undynamic social product or representation, but may play an active part in the constitution, reproduction and transformation of societies" (Braithwaite 1982: 88).

Timothy Yates (1989) directly borrowed the habitus idea from Bourdieu's theory of practice in his structural study of the Saami houses in Norway during AD 1700 - 1900. He sees habitus as a "deep structure" which dominates the division principles of a household space in the Mountain Saami societies. The internal space of a Saami house, the *kåhte*, usually was divided into three general areas, and then subdivided into nine social zones. The hearth always occupied the central area in a *kåhte*. The space between the front door (south) and the hearth is called *uska*, while the back area of the hearth (north) is *påssjo*. The two lateral sides to the hearth were known as the *luoito* (Figure 2-1). These areas were bounded by logs (1989: 250-251).



1



2

**Figure 2. The division of Saami's household space and its principle oppositions. 1.** Saami names for areas of the *k̄hte*. 2. The principle oppositions of the *k̄hte*. After Yates 1989: 252 & 258, Figure 20.1 & Fig. 20.5.

This division of the Saami household space is highly governed by the differentiation between the sexes, the male and the female. The back area of the *kåhte* was men's space where men were sitting and sleeping, and only men were allowed to pass but women were prohibited to enter. However, men could pass through women's area which was the front part between the front door and the hearth, where women were sitting and sleeping. Even in the lateral areas, the *loide*, which were assigned as common zones, had also spatial differentiation between men and women.

Yates' analysis shows that the binary structures based on genders represent Saami cosmological ideology. In the Saami belief system, the Sun-god *Peive* resided at the center of the cosmos and all other gods received his rays. He was also called "the author of generation" because he had the power to make reindeer fertile (1989: 254). The fire at the hearth within the *kåhte* was considered to symbolize the Sun-god. *Sarakka*, a terrestrial being, who received the souls of the dead and was responsible for the new birth of the dead, was believed to reside under the hearth. For this reason, a *kåhte* was also an axis of the living world and the dead world. The door goddess who protected newborn lives resided under the front door whereas the goddess of the hunt dwelt under the back door. The ritual in worshipping gods was usually conducted by men in a separated *kåhte*, where women are not permitted to enter. The slaughtering of a bear played a central part in the ritual. Before the bear's killing, women must keep away from the bear because women could contaminate the hunter and the bear with their menstrual blood. The bear blood was associated with the hunt, the men, the men's space in the *kåhte*, and the goddess of the hunt. The hunting gears were smeared with bear blood in order to build up resistance to the possible pollution to come from the women's menstrual blood, and all of them were housed in the men's space. This explains why women were not permitted to enter men's space but men could enter women's space.

The Saami also had a division of labor for when they dealt with food. Not only hunting but the cooking of game was the men's activities, whereas women were responsible for handling milk and its product. Therefore, conceptual oppositions such as the blood of the prey and menstrual blood, the world of life and the world of death, and

hunting animal meat and the milk, as well as the fundamental dichotomy, the male and the female, correspond to the opposition of the household space: front doorway and the back doorway. These series of oppositions which fundamentally structured Saami life (Figure 2-2) are listed by Yates (1989: 257):

male-female  
sacred-profane  
clean-unclean  
death-life  
back-front  
hunting-milking  
hunting blood-menstrual blood  
north-south  
winter-summer

For Yates, these structures are culturally and historically constituted through diverse practices. A totality of social structures was meaningfully legitimated in the daily activities, and the conceptual meaning of social space was thus constructed. The domestic habitus is thus seen as a structural totality which is permeated in social practice as contextual system. The spatial division, though, was practiced in Saami's daily activities and governed by a cultural habitus structured with Saami cosmological ideology. In his conclusion, Yates has noted that metaphors play a vital role in the structural practices and it integrates all aspects of the contextual system. The cultural habitus is metaphorically constructed through various structures which are associated with each other (259-260).

As a central mode of signification in philosophy and linguistics, metaphor has come to be recognized as a key concept in reading material culture by postprocessual archaeologists. They have explored the significance of metaphors employed by certain material objects in social life (Preucel 2006: 142). The term metaphor was proposed in interpreting material remains in Keith Ray's 1987 paper, "Material Metaphor, Social



Interaction and Historical Reconstruction” (Ray 2000). This paper is a study of the Igbo-Ukwu corpus across three sites excavated in south-eastern Nigeria. In his conception, there are various social meanings which were encoded in materials of the past. The potential statements embodied in objects thus can be understood as “material metaphor,” through which the human expresses meanings (Ray 2000: 399). The use of the term metaphor in this study is utilized to attempt to “address the question of how recognition of the communicative uses of material culture at early Igbo Ukwu adds to our knowledge of the overall historical context of the corpus” (415).

In *Metaphor and Material Culture*, Tilley (1999) has developed Ray’s metaphor model into a more systematic theory. The prerequisite of Tilley’s study is that he believes that metaphors “are as pervasive in culture as they are in language” (Tilley 1999: 36). In order to straighten out the relationship between metaphor and material culture, Tilley introduces the other term “body” into his discussion. Because metaphors systematically and functionally represent the human mind, they are directly involved in “bodily experience and action” (34). These metaphors permeated cultures, which act in the social world from the source that is the human body (37). The body can be envisioned as “the ground or anchor by means of which we locate ourselves in the world” (34). Thus, the body, culture and metaphor interact in constituting a social world (35). Through his analysis of material forms such as the human body, architecture, animal symbolism, technology, and artifacts, Tilley has found that while humans create artifacts, artifacts also create people (36-76).

In Tilley’s argument, objects, like humans, have biographies. Because objects and the body act on each other and even create each other, they should certainly be seen as active rather than passive aspects in culture (76). An example Tilley takes may clarify the relation between metaphor, body and material. The stone axe has ceremonial meanings in the southern Massim area of Papua New Guinea; it is used to symbolize personhood in mortuary ceremonies. The blade of the axe is named *binona*, which means “genitals” and “right hand.” A wooden handle is suggestive of bones (*tiotiwa*). The handle is made of a red wood which is believed to refer to maternal flesh and the matriclan. A bird image,

symbolizing the clan membership, appears to be the head of the handle. The wooden haft of axe is regarded as “bones,” “flesh,” and clan “head.” The blade serves to signify an individual but also a member of a clan. The meanings of the axe are polysemous in the social life in the southern Massim. In the Sabarl Island people see the triangle shape of the axe as representation of the lateral movement of possessions between the father’s side and the mother’s side. The bend of the handle signifies a reciprocal relation between groups. Hence, we may see the elbow of the axe as a metaphor of the social action. The bird head is a symbol of clanship, but also a reef heron in myth. The beak of the bird is often a snake, and both are the creators of human world. However, the coexistence of a bird and a snake also has a sexual implication. This case study shows how material forms, as active social structures, metaphorically create meanings (72-75).

One archaeological trend which is worth noting is that there is the link between structuralism and study of religious rituals. The social dimension, ideological meanings, and aspects of time and space are theoretical emphases in postprocessualist structuralism. Postprocessualists pay great attentions to the living context of material remains in theorizing ritual systems. For them, the context of the artifact and of the place is “the most important criteria” in building a theoretical and methodological framework for the archaeology of the ritual (Bertemes & Biehl 2001: 17). Every object can be seen as “a contextural structure” which fulfills meanings. What we should be aware of is that the artifact is not made in random but is a result of “a system of making;” that is to say, “every artifact was made by a certain maker in a certain way, at a certain place and for a certain purpose.” Thus every artifact bears its own message and constitutes “its own living context,” which is “part of broader cultural patterns” (Bertemes and Biehl 2001: 17). Moreover, we may get close to knowing how the artifact is used and functions in ritual practice if we scrutinize these patterns.

In the 1960s, Edmund Leach described ritual as a medium, which expresses cultural ideals and models in an aim to modulate social behavior (1973, 1976). For postprocessualists, the ritual, as ideological production, plays a vital role in structuring human society (e. g. Barrett 1991; Hastorf 2007; Shanks & Tilley 1982). From a

structural perspective, John C. Barrett (1991) considers ritual as text or discourse. It is more like “everyday talk.” In his words, “The material evidence does not exist as the mute record of a past society, but exists as the fragmentary remains of worlds once inhabited by speaking and acting humans, who used those material conditions to structure and defend certain traditions of discourse” (1991: 6). Because the meaning of the ritual lies in “the text of the ritual discourse itself,” knowledge of ritual and religion is “thus built out of the same material conditions as everyday life” (6). Barrett particularly highlights the relation between social practices and rituals. Ritual is a metaphorical, routine discourse in everyday life and forms “a well defined and particular region of social practice, which may be associated with rites of social transition or renewal” (6). In Hastorf’s words, people “create new enactments of rites which help restructure society” by using the previous ritual experiences in their memories (2007: 79). In addition, Barrett realizes that ritual could legitimize political hegemony and may particularly be used in political transition (1991: 7). Furthermore, Kyriakidis recognizes the role that ritual played in the identification of social groups. As he wrote, “The shared experience of participating in rituals forms a link between people, and thus ritual participation defines the membership to certain social groups” (2007: 295).

## **Shamanism and the Archaeology of Shamanism**

### **The Fundamental Characteristics of Shamanism**

Shamanism was reported by Western travelers as early as the twelfth century. However, more information about Siberian shamans was brought into the Western world by various travel account and missionary literatures since the sixteenth century (Dubois 2009). In the eighteenth century, many European scholars of various vocations (such as philosophers, missionaries, archaeologists, physicians, botanists, and ethnographers) became observers of shamans in Siberia (Walter 2004).

In Western literature, “the word *shaman* comes through Russian sources from the Tungus word *šaman* (*xaman*)” (Siikala 1992a: 1)<sup>3</sup>. However, reference to a word with similar pronunciation and the same meaning as the Western word *shaman* appeared in a Chinese publication in the twelfth century. Shi (1989) states that it occurs “much earlier than its introduction into the western world” (1989: 241). The Chinese historical book in the Southern Song Dynasty (1127-1279), titled *Sanchao beimeng hui bian*, was compiled by Xu Mengxin (徐梦莘 1126-1207) and published in 1194. In chapter 3, Xu writes: “*Shanman* (珊蛮) is the sorcerer of Jurchens people” (Xu 2008). Jurchens, ancestors of today’s Manchu, were a Tungus people who originated roughly in the Northeast of modern day’s China. During their rise, they established the Jin Dynasty that ruled the northern half of China (1115-1234).

The definition of shamanism is still in debate. However, today’s scholars “have generally agreed that shamanism is in some sense a religious phenomenon” (Walter 2004:XXI). Although some researchers such as Alice Beck Kehoe, are critical of the universal application of the term shamanism, and argue that the term should be confined to the Siberia-Arctic area (Kehoe 2000: 102), since the beginning of nineteenth century, shamanism has gradually been considered a common religious phenomenon not only in Siberia but also in America, the Pacific, Australia, Africa and Asia (D’Anglure 2009: 639). Piers Vitebsky, for example, argues that “Shamanic motifs, themes and character appear throughout human history, religion and psychology” (1995: 10). He further points

---

<sup>3</sup> There are two different arguments about who first introduced the word *shaman* to Western literature. According to Berthold Laufer (1917), the first people to bring the word *shaman* to Europe were two Dutch diplomats, E. Ysbrant Ides and Adam Brand, who were members of a Russian embassy to China from 1692 to 1695. Ysbrant Ides published his writing of the travelling at Amsterdam in 1698, which included a description of the family shaman among Tungus people (1917: 361). However, in Flaherty’s (1992: 23-24) argument, it is the another Dutch man, Nicolas Witsen (1640-1717) who popularized the word *shaman* in Europe. Witsen was also famous because he was eventually the mayor of Amsterdam. His youth was spent travelling in Russia, and his travels resulted in a book, *Noorden Oost Tartaryen*, in 1692. Although his writing was in Dutch, “he used the Germanicized word *Schaman*” to mean “a priest of the devil” among the Tungus people (Flaherty 1992: 23). In the eighteenth century, the word *schaman* was broadly used by German explorers and scientists who traveled in Siberia (Znamenski 2007: 5).

out, “Shamanism is not a single, unified religion but a cross-cultural form of religious sensibility and practice” (11). I. M. Lewis’s definition of *shaman* represents this trend:

A shaman is an inspired prophet and healer, a charismatic religious figure, with the power to control the spirits<sup>4</sup>, usually by incarnating them. If spirits speak through him, he is also likely to have the capacity to engage in mystical flight<sup>5</sup> and other ‘out-of-body’ experiences. (Lewis 1984: 9)

Hungarian scholar Mihály Hoppál (1993) specifically pays attention to the theoretical importance of the belief system when he defines *shamanism*:

Shamanism is a complex system of beliefs which includes the knowledge of and belief in the gods and helping spirits of the shamanic pantheon, the memory of certain texts (chants, shaman-songs, legends, myth, etc.), the rules for activities (ritual, sacrifices, the technique of ecstasy, etc.) and the objects, tools and paraphernalia used by shamans (drum, shaman staff, bow, mirror, costume, etc.). All these components are closely connected by beliefs given in the shamanic complex. (p. 184)

---

<sup>4</sup> Author’s Note: All sorts of shamans have helping and tutelary spirits. In ethnological literature they are also known as “familiar” or “assistant” spirits. Most of the shaman’s assisting spirits take in animal shape. Their forms, names, and numbers are different from region to region. A shaman has his personal helping spirits, which provide supernatural aid so that the shaman can contact the supernatural world (See Hultkrantz 1978: 38-40). The spirits are incorporeal but capable of becoming visible at their pleasure. They usually assist the shaman in four ways: to help on journeys, to give powers, to teach knowledge, or to possess the shaman (See Walsh 2007: 131-150).

<sup>5</sup> Author’s Note: Shamanic magical flight is also called “shamanic journey” or “soul flight”. In an ecstatic state, a shaman’s soul can symbolically leave his body to travel and roam at will through the upper, middle, and lower world. The shaman may seek knowledge and power for himself or for his people, may seek information for healing, for hunting or to appease and petition the gods, and may also conduct soul retrieval for the sick or guide the souls of the deceased to the other world. See Walsh 2007: 151-156.

One problem in the study of shamanism is how to differentiate the shaman and the other religious specialists. Ruth-Inge Heinze (1989) suggests that a real shaman can be recognized by the following characteristics:

- 1) Shamans can access alternate states of consciousness at will.
- 2) They fulfill needs of their community which otherwise are not met.
- 3) They are mediators between the sacred and the profane. (pp. 355)

Generally, Shamanism is characterized by the three-tiered cosmos, the spiritual flight, helping spirits, altered states of consciousness, use of hallucinogens, shamanic performance, professional paraphernalia, and their social role as spiritual leaders.

The shaman can mediate between the human world and spiritual world. This perspective is based on a belief in the shamanic universe. It is believed that “the shaman’s theoretical doctrine is founded on his concept of the cosmic realm, of which he is a part” (Rogers 1982: 5). The fundamental structure in the shamanic cosmos is described by numerous researchers (e.g., Eliade 2004[1964]: 259-266, Hutton 2001: 59-67; Vitebsky 1995: 15-17; Walsh 1990: 113). The shamanic universe is vertically tiered, and it is comprised of the upper world, the middle world, and the lower world. Each of the three levels may have multiple layers differing from culture to culture. According to Grim (1983), among the Ojibway people in the North America, the present world is called *flat-earth*, while the nether world is called earth and the above is called sky. The earth is four-layered, as is the sky. Each layer of both earth and sky has its ruling Manitou (Grim 1983: 77). Indigenous Siberian peoples believe that the upper world is hidden behind the stars and the lower world is covered by water. Sometimes, the upper world comprises seven layers and the stars are seen as the holes of the celestial world (Pentikäinen 1998: 34). The shaman among the Manchu people in Northeast China calls the whole cosmos “nine skies.” This implies that the universe is broken down into nine layers and each world of the three has three layers. The Sky Deity *Abuhaenduri* and other natural deities live in the upper world with three layers. Human beings, birds, animals and a few spirits live in the

middle world also with three worlds. The lower world with the other three layers is also called earthly world or dark world where the earth mother *banajiemu*, as well as some demons, resides (Fu 1993: 244).

The *Central axis* is a very important concept when today's scholars describe the shamanic universe. It was first proposed by the Finnish scholar Uno Holmberg (1964[1912]) and later was adopted by Eliade (2004[1964]). The central axis may take the form of a world pillar, tree, mountain, and even a "hole," connecting the three worlds (Eliade 2004[1964]: 259-287). As one of Eliade's successors, the Swedish scholar Åke Hultkrantz (1996) provides an essay on the world pillar in the Arctic and sub-arctic areas, which attempts to discuss the symbolic meaning of this world center. In his interpretation, world pillar symbolizes a post to carry sky, just as the main post of a house carries a roof. The top of the world pillar is represented by the polar star. Sometimes, the world axis is symbolized by world tree, which runs through the three worlds. Spirits and shamans communicate between these levels by way of the tree (Hultkrantz 1996: 39-42).

The distinct characteristic of the shaman is to travel between different levels in the universe. This specific skill allows the shaman to be a religious leader of his community. Hultkrantz (1978) points out that it is the structure of shamanic cosmology to provide the possibility for the shaman to travel between the human world and the spiritual world. As Michael Harner (1988: 8) indicates, "Whether people are doing shamanism" depends on "Whether they journey" and "Whether they can remember later the details of what happened to them on their journey." According to Finnish scholar Juha Pentikäinen, as the religious leader of the community, his foremost task is traveling between different levels in the universe. The trip is usually the requirement of his community in order to resolve problems for his people (1998: 31-32). A Manchu folk epic in China told a story that the shamaness *Nisan* traveled to the lower world and took the soul of a dying boy back to the human world (Nowak & Durrant 1977; Durrant 1979; Zhao 2001). According to Eliade (2004[1964]), in the initial journey among the Araucanians, the shamaness flies to the sky and meets God (2004 [1964]: 141). Heinze (1989) generalizes different levels of the shaman's social status as spiritual mediator:

- 1) Socially, they are citizens like everybody else.
- 2) Spiritually, they enjoy a higher position on account of their relationships to the divine.
- 3) During the shamanic rituals, they operate on intermediate levels, between the spiritual world and the world of humans. Normative rules of the social order are suspended and the encounter with the omnipotent spiritual world is screened. On one hand, shamans protect the spiritual world from being polluted by human weaknesses and, on the other hand, they channel spiritual energy in a useful way so that it does not overtax the capacity of their clients. (pp. 359)

Gilberg (1984: 22) is quite right to put the aspect of “spirits” in first in the categories of how to recognize a shaman. Many scholars confirm that the shaman cannot serve his people as a mediator between the different worlds without the assistance of his spirits (e.g., Hultkrantz 1978, Czaplicka 1914, Merkur 1985, Vitebsky 1995). As Hultkrantz states, “The shaman receives his inspiration from his guardian or helping spirits” (1978: 38). In his understanding, as the spiritual mediator, the shaman must establish contacts with the supernatural world. His ability to enter the other worlds comes from the supernatural aid of these spirits. First, the shaman needs to collect the messages from the supernatural world which is delivered to the shaman by these spirits. Second, the shaman needs guidance by the spirits on the way to the supernatural world. The spirits can be animals and can also be plants or other beings. However, most of them take theriomorphic forms, although the animal spirits differ from culture to culture and from area to area (39-40).

M.A. Czaplicka (1914) generalizes how a Siberian shaman is initiated. In her narrative, when the new shaman follows the spiritual call to be a shaman, several spirits (at least one) will naturally become protectors and servants under his control (1914: 172).



Daniel Merkur (1985) reveals different assemblies of the helping spirits in different groups among the Inuit peoples in Alaska. For example, the assisting spirits of Chugach shamans were usually owls and cranes. Shamans' helpers among Nunivak not only included some animals but also included some mythic beings. Shamans on St. Lawrence Island specifically favored walruses, polar bears, and other arctic animals. North Alaskan people had two groups of helping spirits. The first group is comprised of land animals: brown bear, wolf, fox, ptarmigan, lemming, and ground squirrel. The second group consists of sea mammals, including walrus, seal, whale, and polar bear. The different spirits had different particular functions. Among the Iglulik, caribou, fox, ermine, owl, raven, hawk, and all mythic mountain spirits were helpers of the shaman, while the animals with weight and strength such as walrus and polar bear only served the shaman's soul flight (Merkur 1985: 227). In Yakutia, shamans were divided into three groups: the great shamans, the average shamans and the weak shamans. The different numbers of spirits which were controlled by the shaman determined the different powers the shaman might have. In the great group, for example, a shaman usually had the larger numbers of spirits, while the average shamans had less, and the weak shamans had the least spirits. Some spirits were invisible people and others appeared as animals, birds or fish (Alekseev 1984: 269). In *the folktale of the Nisan shamaness* from Machu, Nisan called up her helping spirits to help her cross a river she encountered on the journey to the kingdom of the dead. These spirits called by *Nisan* include the "Great eagle", the "silver wagtail", the "malicious snake", the "eight pythons" (Nowak & Durrant 1977: 62-63).

Piers Vitebsky describes how the spirit helpers cooperate with the shaman. Some animal spirits can carry the shaman on a journey. Moreover, the spirits often predict danger and enemies that the shaman may encounter on the way ahead. Magic abilities and strength are also provided to the shaman by his helpers. Spirits not only serve as the shaman's helper, but also as their teachers. Animal spirits can endow their specific properties to the shaman. For example, a shaman may be fierce if assisted by a jaguar spirit, he may pass through a tiny hole if working with the mouse or weasel spirit, and may fly in the sky or move underwater with help from the bird or fish spirits (1995: 67-

69). The helping spirits can also help shamans to transform into the animals. According to Pentikänen, shamans can not only transform themselves into animal forms, but can even change their gender during the rite (1998: 32). Basilov has recorded that in the beliefs among the Kamchadal, Koryaks and Chukchis, the spirits often require the person to change sex when he is forced to become a shaman (Basilov 1978).

Only when the shaman falls into a state of ecstasy, is he able to transform, to work with spirit helpers, and to pass through the different levels of the universe. Hultkrantz (1978) sees ecstasy as the “primary task” of the shaman (1978: 33). He further points out that “The shaman’s role as a mediator is founded on the idea that he alone is equipped to serve the interests of the society on the ecstasy level” (34). As a term, “ecstasy,” as well as “trance,” is used to describe the state when a shaman’s physical body loses his consciousness and his soul ascends to the upper world and descent to the lower world. During ecstatic state, the shaman symbolically communicates with the spiritual world. To express this phenomenon, researchers also use a general term: altered states of consciousness (ASC) (Siikala 1992b: 26-27).

Vitebsky conveys a list of physiological symptoms when a shaman falls into ASC: “trembling, shuddering, goose-flesh, swooning, falling to the ground, yawning, lethargy, convulsions, foaming at mouth, protruding eyes, insensitivity to heat, cold and pain, tics, loud breathing, a glassy stare...” (1995: 64). Additionally, “mental dissociation” is revealed to be associated with ASC by researchers such as Lewis (1971: 38). Moreover, this “mental dissociation” appears to be “accompanied by exciting visions or ‘hallucinations’” (38-39). Diana Riboli believes that the trance experienced by most shamans has mainly two different typologies: the first type is “altered states of consciousness in the course of which a specific supernatural being comes to the world of humans and is lodged within the body of the shaman;” the second type is the journey to other cosmic zones carried out by the shaman in the course of the trance, during which the shaman’s body remains on the earth and the soul travels to the heavens or the underworld” (2004: 253-254).

The shaman falls into an ecstatic state through a wide range of stimuli. Lewis has noted that these stimulating techniques, which are “applied either separately or in combination,” include “the use of alcoholic spirits, hypnotic suggestion, rapid over-breathing, the inhalation of smoke and vapours, music, and dancing; and the ingestion of such drugs as mescaline or lysergic acid and other psychotropic alkaloids” (1971: 39). However, Lewis also finds that the altered states of consciousness may sometimes be induced without the stimuli (39).

Shamans achieve the altered states of consciousness sometimes through the ritual use of hallucinogens. As what Michael J. Harner has stated, this phenomenon has been recognized to be “evidently a widespread shamanic practice” (1973a: xi). The psychoactive mushroom, fly-agaric (*Amanita muscaria*) is a very common hallucinogenic agent to be costumed by Siberian shamans (1973a: xii). Waldemar Jochelson (1908) was one of the earliest scholars to record how shamans eat fly-agaric to achieve ecstasy. Cactaceae (such as peyote) is used by the native tribes of northern Mexico and the United States. Convolvulaceae (Morning-glory family) is used not only among Mexican Indians but also among South American Indians (Schultes 1972). Although tobacco is not considered as hallucinogen in modern natural science, shamans in North and South America use it to get into ecstasy states like using the hallucinogen (Wilbert 1972). Among South American Indians, shamans also use a sort of wine as a common psychoactive drug (Harner 1973b; Naranjo 1973). The drug-induced experience in Schultes’ description is “the hallucinogens act on the central nervous system to bring about a dreamlike state” (1972: 4).

Music and dance are also very important in inspiring the shaman to enter the ecstatic states. Aaron Watson (2001) considers sound, rhythm and dance to be “an important means of creating connections with the supernatural worlds” (2001: 178). Shamanic séance and related dance in Yakutia has been described in many documents since the seventeenth century. The Yakut shaman of Siberia often gets into a state of ecstasy through dancing and chanting. When dancing the shaman imitates exactly the movements of the horse, the bird, or the reindeer (Žornickaja 1978). According to Eliade,

the drum plays an important part in shamanic ceremonies (2004[1964]: 168-176). On the one hand, “The shaman flies away to the Cosmic Tree” by drumming; on the other hand, “The shaman is able to share in the nature of the theriomorphic ancestors” by virtue of his mystical relations with the “Reanimated” skin of the drum (171). In Spencer Rogers’ words, “The drum in shamanistic séances may be nothing more than a device for creating rhythm as an aid in developing the state of mind necessary for the trance on the part of the shaman or for hypnotic influence on the patient” (1982: 36). As Roger Walsh has mentioned, when a drum is played at a tempo of some 200 to 220 beats per minute, according to the reports from most new shamans, they successfully conduct the supernatural trip even the first time (1990: 174).

The importance of shaman’s paraphernalia is highlighted by scholars. Shirokogoroff has stated, “There is no shamanism without paraphernalia” (Hutton 2001:78). According to Rogers (1982), shamanic paraphernalia differs from area to area in the world. Yakut and Tungus shaman of Siberia equip themselves with “complex garments, animal skins, furs, reindeer bones, and mammoth ivory” (1982: 34). Metallic ornaments are common decoration on those special dresses. American Northwest Coast Indian doctors confuse and disorder their hair to keep their appearance different from normal humans. American Northwestern shamans wear masks to represent various animals. Downy eagle feathers, an obsidian knife, a painted stick, or a medicine bundle are the normal equipment for a Southern Ute doctor. Except for musical instruments and medicine objects, house structure is also included in the shamanistic paraphernalia. Shamans of Chico of Panama conduct healing séance in a special house structure; the séances of the Eskimo shaman of Hudson Bay are held in a special tent (Roger 1982: 34-35). S. A. Mousalimas (2003) describes the ritual use of shamans’ masks in Alaska. The animal motifs on the masks were usually spirits the shaman experienced. The shaman’s dolls were also a very important tool in his ritual. Yup’ik shamans often hid the dolls and consulted them “as oracles” (2003: 172). The dolls among Central and Western Aleutian shamans were even life size. Small dolls made by Koniag, Chugach, Dena’ina, Eyak and Tlingit shamans included human and animal form. They were used in healing rites “to

extract the source of illness from patients” (172). It is worth emphasizing that materials in the archaeological record, such as the drum, dress, bag, mask, the other shamanic equipment, and the symbols carried by them, are the main resource for archaeologists’ study of shamanism.

Various magical designs are decorated on objects used by shamans. In Rogers’ record, the drawings on the body of an Australian aboriginal shaman are usually symbols of crystal spirits (1982: 34). The Guiana shaman often carves a bench in the form of a conventional animal which may be a turtle, tiger, alligator, or a macaw. The same animal symbols are also painted on the divining stool used by Arawak medicine men in Guiana and Brazil. The imagery, as representations of spirits, is believed to give the doctor power (Rogers 1982: 34). When observing Siberian shamanism, Hoppál notices that many symbols on shaman’s garments and head-dress bear particularly cosmic meanings. Dual oppositions are widespread in shamanic symbolism. Even shaman’s garments, for example, are decorated by two colors: white and black, red and black or white and red. He also finds that a Yukagir shaman’s cloak has two human figures on its left side but has two bird figures on the right side (Hoppál 2001: 77). Leonid Lar’s 1998 paper, recording of the Nenets shaman’s dress is cited by Hoppál. The three cosmic worlds are symbolized by three parts of the Nenets shaman’s dressing: the head-dress - the Upper World, the cloak - the Middle World, the footwear - the Lower World (Hoppál 2001: 78). Pavlinskaya (2001) also notes, “The shaman’s ritual costume symbolizes the universe and its sacral center. Making a costume equaled, in a way, the creation of a macrocosmos: cutting the reindeer hide = the division and destruction of the world; sewing the pieces of the costume together = creation of a cosmic whole” (2001: 48).

Paintings on the shaman’s drum also constitute a very important part in shamanistic symbolism. The Finnish scholar Uno Holmberg (1964[1912]) firstly describes the symbols painted on Saami shaman’s drums. The most frequent symbols include sun, moon, tents, houses, animals, the other divinities, and inhabitants in the underworld (also cited by Rogers 1982: 36). For a Siberian shaman drum, as M. Jankovics (1984) suggests, whether it is round or oval, “it is a reference to the cosmos”

(1984: 150-151). The sun, the moon, as well as stars are common motifs on the drums. The oval drums are considered to represent the world-egg shape of the universe. The center, as the “the navel of the sky or the earth,” is sometimes symbolized by a mountain, or decorated by a cross (153).

The social roles of the shaman have been emphasized by more and more scholars. Shaman, as Hultkrantz points out, “is the doctor” (1978: 35), “is the diviner” (37), “is the psychopomp who escorts the souls of the dead to their new realm in the other life” (37), “is the hunting magician of the group, both, as a diviner and as a charmer of animals” (37). In Japanese scholar Irimoto’s words, “Shamanism can be regarded not only as an institution to maintain and coordinate the relationship between humans and the deities, with an emphasis on hunting, but also as an institution for solving problems in daily life” (1997: 43). Sanžeev states that the Buryat shaman conducts such social functions as “mediator between men and spirits,” “specialist in folk medicine,” “maintainer of the shamanist philosophy,” and “bearer of the traditions of the people” (Krader 1978: 189-190). Grim stresses that the shaman is “a spokesperson informing the spirit world of the tribe’s needs. Significant tribal activities, such as hunting and agriculture, are often undertaken only with the guidance and support of the spirits communicating through the shaman” (1983: 11). Pentikäinen suggests that “The shaman should be an expert in the ideological tradition in his culture” (1996: 12). For example, one of the important elements of shamanic initiation is “the transmission of mythical traditions” (12).

Different cultures have different traditions about how a new shaman is initiated. However, this area of study is generally “obtained from the supernatural forces by revelation and mystic experiences,” and “the shamanistic call may result from seeing visions, having epileptic seizures, or displaying erratic behavior” (Rogers 1982: 15). According to Siikala, “A preliminary sickness” is one of characteristics of shamanic initiation (1992a: 6). Usually, a neophyte often has to receive training from the old shaman because he needs to learn the knowledge of his future vocation. The knowledge includes the spirits’ names, ritual songs, and the skills to work with the spirits (Mousalimas 2003: 170-171). Various ordeals often happen to a shaman candidate in the

initiation rite. Hoppál (1992a) emphasizes that this is a universal phenomenon in all areas of the world. In Rogers' description, in the initiation ritual, the shaman "may have his body cut in pieces and his blood drunk by evil spirits" (1982: 16). In 1957, the Hungarian anthropologist Vilmos Diószegi interviewed an old shaman Kyzlasov at the Sagay village of Abakan in southwestern Siberia. The shaman told Diószegi that he was initiated in a dream. In the dream he was cut into pieces and was boiled (Diószegi 1968: 62).

### **General Shamanism Theory**

Mircea Eliade (1907-1986), a Romania-born American historian of religion, is generally considered one of the outstanding scholars to create a new era of idealization and universalization in shamanism studies (e.g., Hamayon 1998: 180, 2004: 144-145; Walsh 2007: 14). His *Shamanism: Archaic Techniques of Ecstasy* (2004[1964]), which was published in French in 1951, can be seen as a milestone in the history of shamanology. Since its English translation was published in the 1960s, it fascinated both scholars and the public worldwide and increased shamanism research around the globe (Kehoe 1996: 377; Znamenski 2007: 165). His success relies on the fact that he does not confine his study to North of the Eurasia like his predecessors (e.g., Finnish scholar Castrén and Holmsberg, and Poland-born British scholar Czaplicka), but integrates variations of shamanism in most parts of the world under the same concept (TePaske 1997: 19). His study areas cover Central and North Asia, North and South America, Southeast Asia, Europe, India, China, and the Far East (Eliade 2004[1964]). He has hence built a broad, cross-cultural, and universal framework on the shamanism studies. Znamenski has correctly commented, "His contribution to shamanism studies was to stretch out the geographic borders of the shamanism metaphor. In a sense, he made shamanism go global" (2007: 180).

According to TePaske (1997), both Eliade's universalism and Jung's analytical psychology share ideas of archetype and symbol. While "Eliade documents shamanism as an archaic and global religious complex," Jung compares the similarities between "certain special features of shamanism" and some psychological features of modern people (TePaske 1997: 20). Therefore, Eliade's and Jung's universal perspective spans

not only across space, but also across time. As Znamenski has noted, Eliade's universalism is represented in three respects. The first, all shamans worldwide use the sacred technique "ecstasy" to interact with the other worlds (2007: 172). Eliade directly defines shamanism with this shamanistic technique. He puts it, "A first definition of this complex phenomenon, and perhaps the least hazardous, will be: shamanism = *technique of ecstasy*" (2004[1964]: 4). The second universal element, points out Znamenski, is the symbol of the world center, *axis mundi* (2007: 173). This *axis mundi* can be embodied by the world pillar, world tree, and cosmic mountain, and are variable among the peoples in the world (Eliade 2004[1964]: 259-279). The third archetypal pattern, stressed by Eliade, is the worldview of a three-leveled universe, namely, the universe consists of the upper world, the middle world and the lower world. And the world axis connects these three worlds (Znamenski 2007: 173).

The term "ecstasy" in Eliade's theory is often equated with the term "trance." However, while some experts generally agree that both *ecstasy* and *trance* actually signify the same thing (e.g. Hultkrantz 1957, 1973, 1978; Siikala 1978), others suggest that the two words should be differentiated (e.g. Rouget 1985). In order to reconcile the controversy, there are also some researchers (e.g. Ludwig 1966; Siikala 1978) suggest adopting the psychological concept "altered states of consciousness (ASC)" in replacement of ecstasy and trance.

Today, ASC, as described by Atkinson (1992: 310), "has been the buzzword in interdisciplinary studies of shamanism." However, in Michael Harner's (1986) opinion, ASC is a too broad term, which does not specifically refer to shamanistic work. Hence he rephrased ASC as "Shamanic States of Consciousness (SSC)." To his mind, SSC not only involves the general trance state, but also signifies "a learned awareness of shamanic methods and assumptions" (Harner 1986: 26). It separates the shamanistic experiences from the other phenomena related to ASC.

The definition of shamanism according to shamanic ecstasy, trance, ASC, or SSC led to cross-cultural studies of shamanism. Multiple approaches with ethnology, anthropology, psychology, pathology, pharmacology, therapeutics, linguistics, mythology,



and archaeology have been employed under the name of shamanistic study since the 1960s. A number of anthropologists actively contribute monographs synthesizing shamanistic phenomena from various areas in the world in the last three decades (e.g., Edson 2009; Grim 1983; Halifax 1982; Harner 1980; Hutton 2001; Place and Guiley 2008; Ripinsky-Naxon 1993; Rogers 1982; Stone 2003; Stutley 2003; Vitebsky 1995; Walsh 1990, 2007; Webb 2003). Most general theorizing concerns history, culture, and social context. The common themes are manipulated in a framework “among widely dispersed populations” (Atkinson 1992: 308). From the 1970s and onwards, many European researchers paid great attention to the Siberian and Arctic areas (e.g., Balzer 1997; Diószegi and Hoppál 1978; Merkur 1985; Hoppál 1984; Siikala and Hoppál 1992; Pentikänen 1996, 2001; Pentikänen et al., 1998; Siikala 1978), while some American scholars specifically focus on the studies of hallucinogens in northern and southern America (e.g., Furst 1972, 1976a; Harner 1973c; Leary 1997; Luna and Amaringo 1991; Metzner 1999; Myerhoff 1974; Rios 1984; Wasson 1980). Paralleled by interests in hallucinogens, therapeutic and psychological approaches were well organized by Anglo-American scholars beyond the anthropological discipline. Scholars prior to the 1960s often saw shamanistic ecstasy as the result of mental disorder, but since the 1960s, the major thought about shamanism “has been moved from the category of abnormal psychology to the category of universal psychobiological capacities” (Atkinson 1992: 310).

The period from the 1960s to 1980s is also an era when Lévi-Strauss’ structuralism was advocated by many anthropological approaches. This academic trend has inevitably had a vital impact on the studies of shamanism. Michael Ripinsky-Naxon (1993) views various symbolic forms within shamanistic transcendence as metaphors. As he puts it, “(T)ranscendence is manifest in many diverse symbolic forms, which are only metaphors for human desires and efforts to attain special goals. These symbols are the conveyors of messages from the unconscious to the conscious mind” (Ripinsky-Naxon 1993: 194). Therefore, a shaman is the symbol of the transcendence (195). A diverse network of mental imagery generates from the structures of the shaman’s cosmos, which

identify the essence of a society (194). Thus, Ripinsky-Naxon states that metaphors, as well as myths, which are offered by shamanistic structures of the consciousness, “accommodate the ecclesiastical needs of every religious tradition” (196). The concepts of metaphor and symbolism are also employed in studies of particular shamanistic phenomena. Through his field work of shamanistic initiation among the Yanomami in Venezuela, for instance, Zeljko Jokic (2008) maintains that the neophyte’s body shifts into a cosmic body after the process when spirits enter and abide in the body. The shaman’s body thus becomes a metaphor of the Yanomami universe. Since the body fuses with the cosmos and the border between the ego and the world, or between the internal and external dimensions, diminishes, “the new sense of egoic self becomes infused with the world” (Jokic 2008; 51).

From the 1990s, some scholars began to shift the universal examinations to particular studies of shamanism. These scholars pay more attention to the historical, cultural, and social contexts of a particular culture rather than the synthetic theories (Atkinson 1992). As Atkinson states, “Local knowledge from distant cultures does not always carry great weight in interdisciplinary dialogs, especially those involving psychology, the natural sciences, and medicines” (1992: 321). According to Dubois, “An impressive number of culture-specific ethnographies” have been contributed by scholars “within particular cultural settings” in the last two decades (2011: 101). While some scholars focus on case studies of a certain people, (Bacigalupo 1998, 2004; Humphrey & Onon 1996), others provide studies on particular themes, which include ethnography of healing (Connor & Samuels 2001; Laderman & Roseman 1996), text and performing art (Furst 2007; Kenin-Lopsan 1997; Kim & Hoppál 1995; Roseman 1991; Schechner 1985; Schechner, R. & Appel, W. 1990; Walraven 1985), material culture (Furst 2007; Pentikäinen et al., 1998), gender (Holmberg 1989; Lang 1998), and politics factors (Santos-Granero 1991; Sonne 1982).

### **The Archaeology of Shamanism**

Eliade’s universalization of shamanism inspired many scholars to explore potential shamanic practices through examinations of archaeological records, since his

famous monograph, *Shamanism: Archaic Techniques of Ecstasy* (2004[1964]), was published at Paris in 1951. The methodology to connect archaeological data with shamanism has been increasingly employed by archaeologists, especially in the last three decades (e.g., Aldhouse-Green & Aldhouse-Green, 2005; Chang 1981, 1983, 1986, 1992; Clotte & Lewis-Williams 1998; Devlet 2000, 2001; Freidel et al. 1993; Hayden, 2003; Lewis-Williams 1980, 1981, 2002, 2006, 2008, 2011; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2004, 2005; Pearson 2002; Price 2001a; Reilly 1989; Stahl 1986; Vanpool & Vanpool 2007; Whitley 2000). The data from the archaeological record, which are used to explore shamanism, are mainly associated with prehistoric art (Price 2001b: 6).

The German anthropologist Andreas Lommel (1912-2005) is one of the earliest European scholars to explore the potential shamanic phenomena in terms of archaeological records. His shamanic approaches are well represented by his monographs such as *Shamanism: The Beginning of Art* (1966), *Prehistoric and Primitive Man* (1966), and *The World of the Early Hunters* (1967).

The relatively abundant ethnographic and ethnohistoric data in North and South America have enabled American scholars to seek the evidence of shamanism in the archaeological record. In the 1950s, archaeologists started to discuss how hallucinogenic plants were used for vision questing in prehistoric cultures in North America (e. g. Campbell 1958). According to Peter Furst (1976a), hallucinogenic plants such as *Sophora*, associated with artifacts and rock art, have been found in many prehistoric sites, dated to around 7000 - 8000 BC. Generally, Peter Furst is considered to be the pioneer who first connected the prehistoric art in Mesoamerica with shamanic practice (Klein et al., 2002). When he deals with a group of prehistoric Western Mexican tomb figurines, Furst (1965), rejecting the traditional standpoint which views them as warriors, first suggests that the horned head of these sculptures should be identified as symbols of shamanic supernatural power. In a later paper, Furst (1968) draws attention to the man-jaguar figurines in Olmec

civilization<sup>6</sup> in Southern Mexico, and proposes that these sculptures depict ancient shamans in the process of transformation during altered states of consciousness. His theoretical framework is based on the ethnographic and mythological literature of northern Brazil, Venezuela, and the Guianas. Many tribes in these areas shared “the concepts of shaman-jaguar equivalence and metamorphosis” (Furst 1968: 158). However, Furst soon realized that the significance of hallucinatory plants in South American shamanism was omitted by Eliade; thus, his 1976 paper proposed new criteria of shamanism in the New World in addition to Eliade’s approach (Klein et al., 2002: 388), clearly emphasizing the cosmological features. The specific environmental elements are also highlighted in his perspective, which considers hallucinogens and human-animal transformation as a fundamental base in American shamanism (Furst 1976b).

It is evident that Furst’s new criteria remain influential to other scholars who study shamanism in pre-Columbian art. Freidel and his colleagues (1993) provide shamanic explanations of Maya<sup>7</sup> temple pyramids, and the concept “world center” is employed to explain these artificial mountains, which are suggested to be an access for Maya shaman rulers to contact the upper world and the lower world. Furst’s human-animal transformation model has also been accepted by Keit Reilly (1989) when he conducted a close examination of a figurine in the Princeton Art Museum. The statuette portrays a kneeling, unclothed man with sunken eyes and hairless pate engraved with design of a toad. Reilly, accordingly, identifies this figurine as a shaman in a process of transforming himself into an animal under the influence of *bufo marinus*-derived hallucinogens. Furthermore, he believes that such a theme of art represents the personal charisma “that was a power source for shamans and for hereditary rulers” by symbolizing “the ruler’s ability to perform the rituals that chartered and sanctified his rule” (Reilly

---

<sup>6</sup> Olmec civilization was an ancient political entity in southern Mexico during the period from 1200 to 500 BC. See Reilly 1989.

<sup>7</sup> Maya civilization flourished in Yucatán peninsula in Mesoamerica from 200 to 900 AD. See Schele & Freidel 1990.

1989: 18). Ortiz de Montellano (1990) states that human-animal transformation and animal helping spirits can be identified in Aztec<sup>8</sup> iconographic expressions.

Furst's shamanic explanation of the ancient Mesoamerican civilization was employed for the interpretation of Shang art of the Chinese Bronze Age by K. C. Chang (1931-2001), an archaeologist at Harvard University. According to Furst's (1976b) "Asia-America substratum" model, which assumes Asian and American archaic cultures originated from the same Paleolithic substratum, Chang (1983) argues that Shang China might parallel Mesoamerican ancient civilization in that both shared the political structures characterized by shaman rulers. Focusing on the animal designs which decorate Shang and Early Western Zhou bronzes, Chang (1981) argues that these theriomorphic beings are animal familiars which assist shamans as agents between the human world and the spirit world.

Furst's general shamanism theory has still remained influential to today's American archaeologists, such as Christine Vanpool. Vanpool emphasizes the importance of cross-cultural regularities in archaeological studies of shamanism, and thus draws upon a general methodology "for identifying the presence of shamanism and discovering its basic structure using material culture," because, in her opinion, "a more general methodology based on a synthesis of the relevant characteristics of shamanic practice should allow more useful insights" (2009: 177). According to the mechanism of shamanic practice derived from ethnographic literature, she conducts case studies of the pottery paintings and murals of the Casas Grandes culture (AD 600 - 1660) in the North American Southwest. In Vanpool's descriptions, birds, humans, and snakes constitute Casas Grandes symbolic system, and symbols such as horned/plumed serpents, birds painted on female effigies, and humans in transformation all suggest that ecstatic ritual and shamanic cosmology dominated the Casas Grandes' belief system and religious practice (Vanpool 2009; Vanpool & Vanpool 2007). Like Vanpool, Peter Stahl (1986) also uses a general shamanic theory in analyses of prehistoric artistic symbols. When

---

<sup>8</sup> The Aztec Empire was centered in the Valley of Mexico, establishing highly developed civilization from the fourteenth to sixteenth century. See de Montellano (1990).

dealing with hundreds of discarded human figurines in West Ecuador as early as the fourth millennium BC, based on a belief that the native South Americas shared shamanic cosmology in most parts of the world, Stahl concludes that these prehistoric symbols are associated with ancient ecstatic rituals. Some ethnographic literatures of northwestern South America are cited by Stahl to support his conclusion. Drawing from these literatures, Stahl acknowledges that small anthropomorphic figurines are often used in shamans' healing rituals as helping spirits, and are usually discarded after the ceremony because the figurines are seen as useless items when the spirits depart from them.

However, Furst's general shamanism theory has been questioned by several scholars. Klein and her colleagues reject the connection of Mesoamerican rulers with shamanism, arguing that the Olmec and Maya rulers might fulfill the vital role as religious practitioners, but were not shamans (Klein et al., 2002: 399). To identify the rulers as shamans "is to underestimate their political importance, deny the political and economic basis of their power, and exaggerate the differences between them and rulers elsewhere..." (399). Francfort holds a conservative attitude to the existence of shamanism in the Asian prehistory. He argues that the Neolithic and Bronze Age art productions from archaeological excavation are dispersed and fragmentary, "possibly related to religion," but not "clear evidence of shamanism" (2001: 257). He also provides a detailed analysis of the motifs on tombstones, stelae, and petroglyphs in Siberian prehistory, and states that the iconographic expressions considerably vary by period and region. In this way, he disagrees with the labeling of the arts from Paleolithic to Neolithic, Bronze Age, and Iron Age with a general shamanic concept (257-259). He strongly criticizes that Furst's (1976b) and Chang's (1983) "Asia-America substratum" theory is "too weak, all embracing and ultimately useless" (259). In his opinion, the model appears to be a generalized, shallow theory which fails to approach a deep and particular analysis of regional archaeological materials. He therefore suggests that "[i]t is not necessary to use the general term of 'shamanism' or to try desperately to find archaeological prototypes of shamanic objects or forms" (259).

One focus for shamanism archaeologists is interpreting prehistoric rock art. For over one century, the interpretive rock art research in North America has remained a big problem in prehistoric archaeology. Hutton dominated the arguments concerning the meaning of North American rock art during 1960s and 1970s (Keyser & Whitley 2006). However, in the meantime, some scholars have attempted to use shamanism in interpreting images on rock art in California and the Great Basin (e.g., Grant 1965; Hedges 1976, 1983). Since neuropsychological model was applied in the research of rock art in 1980s, archaeological explanations referenced the shamanic trance hypothesis (e.g., Lewis-William & Dowson 1988, Whitley 1992, 1994, 2000). However, Carolyn Boyd emphasizes “the effectiveness of using ethnographic analogy to interpret the prehistoric art” rather than a neuropsychological model (1996: 152). The ethnographic literature from four Indian groups – the Aztec, Huichol, Yachin, and Pueblo – has been used by Boyd to analyze 4,000 year old Archaic Chichimecan rock art located within the lower Pecos region of southwest Texas and northern Mexico. The Chichimecan art was painted on rock shelters, and the main motif is “anthropomorphic figures passing through opening in a serpentine arch” (152). The striking similarities in iconographic expression between the ethnographic materials and the Pecos River prehistoric art lead Boyd to believe in the validity of ethnographic analogy in interpretation of ancient art. Accordingly, she claims that the anthropomorphic figurines on rock shelters represent “the journey taken by archaic shamans into the Otherworld” (162).

Siberia and Central Asia are usually called “the ‘homelands’ of shamanism” (Devlet 2001: 43) because shamanism has been documented by numerous European and Russian travelers and scholars since the sixteenth century. In the 1950s, Soviet scholars, such as Okladnikov, Matyushenko, Leontiev, and Potapov, started to seek possible evidence of shamanism in prehistoric material cultures (Hoppál 1992b ). In his 1955 work, Okladnikov stated that the evidence of Siberian shamanism could be traced back to the 2<sup>nd</sup> millennium BC in the Baikal region (Hoppál 1992b: 133-134). In his 1972 work, Okladnikov used ethnological comparative literature to focus on the man-animal motifs in the petroglyphs of Tomskaya Pisanitsa, and provided a shamanic interpretation of the

rock images (Francfort 2001:256). According to the works of soviet and post-soviet Russian researchers on Siberian rock art, the main types of rock images have been listed by Hoppál (1992b):

- 1) Bird-headed (dancing bird-like figures)
- 2) Human figures with phallus
- 3) Anthropomorphic figures with horns...
- 4) Masks with horns and antlers...
- 5) Shamans with drum....(pp. 137)

Ekaterina Devlet (2001) is one of main current Russian archaeologists who hold to the shamanic explanation of Siberian rock art imagery. Her ethnographic model primarily consists of three methodologies. The first involves comparing the symbolism embedded in shamanic costumes and iconography in rock art. X-ray-style figurines, as aforementioned, provide evidence to figure out clearly the shamanic representations in rock drawings. Moreover, ornithomorphic decoration and fringe expression both are very important characteristics of Siberian shamanic costumes, and this, in her opinion, definitely helps to recognize the similar motifs in ancient art. For example, a human figure, which is depicted in the Niukzha rock art site in the Olekma River basin, has clear and waving fringes attached to the coat. The figure is also placed among some birds, implying a picture of shamanic flight (Devlet 2001: 43- 46). Devlet's second methodology recognizes shamanic practices in light of drum images. In some ancient rock art sites in Middle Yenisei River and Middle Lena River, many drum images are depicted with anthropomorphic images. The historical shamanic drums in the Altai region even share imagery with these rock engravings (47-50). Devlet's third methodology emphasizes certain head-gear as diagnostic of shamanism. Because head-gear is regarded as very important part of shamans' paraphernalia, and is often represented by horns and antlers, or bird feathers, Devlet uses this ethnographic information as diagnostic of shamanism in exploring the ancient iconographic expressions. Such motifs are


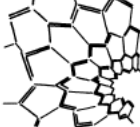
























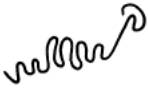




represented in Neolithic and Bronze Age panels from the Upper and Lower Lena, Aldan, Olekma, and Angara river basins, and similar engravings on rock even lasted to the recent historical period (50-54).

Lewis-Williams' neuropsychological model triggered interest in the archaeology of shamanism in the 1980s, though Lewis-Williams was not the first to introduce neuroscience into explanation of prehistoric art. It is Gerardo Reichel-Dolmatoff (1912-1994), an Australia born anthropologist, who first connected rock art and phosphene images. His explorations of Colombian Indian rock paintings suggest that they are representations of mental imagery during trance states (Reichel-Dolmatoff 1967, 1978). Thomas Blackburn (1977) also revealed the similarities between Chumash rock art design elements in California and phosphene images, and thus hypothesized that motifs in Chumash pictographs and petroglyphs of California were produced by shamans when they used psychoactive drugs.

Though they did not pioneer the model connecting neuropsychological research and archaeological remains, Lewis-Williams and his colleagues (such as Dowson, Clotte, and Pearce) did popularize it. Lewis-Williams actually started his shamanic hypothesis of Southern African rock art with the use of ethnographic analysis. He sought evidence from the nineteenth and twentieth century ethnographic records and material obtained from contemporary San informants to set up his shamanic framework in exploring the early human art (e.g., Lewis-Williams 1975, 1980, 1981). In their 1988 paper, Lewis-Williams and Dowson (1988) systematically conducted neuropsychological research in interpreting San rock art of Southern African, Shoshonean Coso rock art of the the California Great Basin, and Upper Paleolithic art of Europe. Their neuropsychological model consists of six entoptic forms (grid, parallel lines, dots and sort flecks, zigzag, nested catenary curves, and meandering lines); seven general principles that dominate mental perception (replication, fragmentation, integration, superpositioning, juxtapositioning, reduplication, and rotation); and three stages in the development of mental imagery. The three stages describe a process that subjects perceive entoptic forms and iconic hallucinations to increasingly deep states of trance. The entoptic phenomenon usually happens in the first

stage, whereas the images in the third stage include both iconic hallucinations (anthropomorphic, therianthropic, or theriomorphic beings) and entoptic forms. The similarities between entoptic phenomena and geometric forms in African and American rock art, and in European Upper Palaeolithic parietal art, as well as the expressions of animals and therianthropes, encouraged Lewis-Williams and Dowson to draw an universal shamanic conclusion of prehistoric art (Figure 3, Figure 4).

ENTOPTIC PHENOMENA			SAN ROCK ART		COSO
			ENGRAVINGS	PAINTINGS	
	A	B	C	D	E
I					
II					
III					
IV					
V					
VI					

**Figure 3. Six categories of entoptic phenomena compared with San and Coso rock-art depictions.** After Lewis-Williams & Dowson 1988: 206, Fig. 1.

PALAEOLITHIC ART			
MOBILE ART		PARIETAL ART	
F	G	H	I

Figure 4. Six categories entoptic phenomena compared with Upper Palaeolithic mobile and parietal art depictions. After Lewis-Williams & Dowson 1988: 207, Fig. 2.

In addition to applying neuroscience to rock art and Upper Paleolithic cave art (Clottes & Lewis-Williams 1998; Lewis-Williams 2002; Lewis-Williams & Dowson 1988), Lewis-Williams has also extended his neuropsychological research to Neolithic material culture (Lewis-Williams & Dowson 1993; Lewis-Williams & Pearce 2005). Lewis-Williams and Pearce's Neolithic research covers two areas: the Near East and Western Europe. The Neolithic art in the Levant area and Anatolia is characterized by human-form stone or clay statues, animal-form engravings, plastered skulls, and wall paintings bearing images including human figures, animals, therianthropy, and various geometric forms. The Neolithic art of the British Isles and Ireland, however, is largely represented by gravestones which are engraved with bizarre geometric forms. Lewis-Williams' and Pearce's arguments show that motifs in the Neolithic art of both areas derived from mental visions, which ancient religious practitioners experienced during altered states of consciousness (Lewis-Williams & Pearce 2005).

Lewis-Williams' neuropsychological model has caused one of the major debates in archaeological studies. While Lewis-Williams has earned himself some advocates, other anthropologists have provided considerable criticism of his model. As Derek Hodgson puts it, "on the positive side, [the neuropsychological model] has helped open up a fresh approach to this aspect of art by providing some valuable insights as to its probable derivation. On the negative side, it leaves open certain questions relating to cultures in which shamanism is known to be absent, but the same or similar motifs are apparent" (2000: 867).

Advocates of Lewis-Williams' theory include Aldhouse-Green and Aldhouse-Green (2005), Bednarik (1990), Bradley (1989), Dronfield (1995, 1996), Hodgson (2000), Patterson (1998), Pearson (2002), Rozwadowski (2001), Sales (1992), and Whitley (1998, 2000). Their research covers European prehistory (such as Irish passage tomb art), Californian rock art, and Australian rock art. Robert Bednarik (1990) and Derek Hodgson (2000) both agree that the Lower, Middle, and Upper Paleolithic geometric symbols might derive from phosphenes, but maintain that phosphene phenomena might be caused by multiple causes rather than the singular cause of shamanic trance. Richard Bradley

(1989) attempts to set up a connection between entoptic forms on grave stones and pottery and the political power of the elite by analyzing data from two distinct regions: southern Brittany in France and Boyne Valley in Ireland. He concludes that naturalistic symbols such as axes, axe ploughs, bows, “yokes”, “shepherd’s crooks”, and the other geometric designs all match entoptic phenomena. These symbols, largely found in elite graves, indicate that trance techniques were dominated by the local elite. Jeremy Dronfield (1996) conducts a diagnostic analysis by testing entoptic phenomena in ethnographic and ethnohistoric accounts of shamanic practice in America and Africa, including the Colombian Tukano, the Chumash of California, the Huichol of Mexico, the Nuba of Sudan, the Benin of Nigeria, the Northwest Coast Indians. These analyses have confirmed that the link between subjective visual experience and prehistoric art can to some extent be identified. According to these diagnostic shapes, he speculates that Irish megalithic art designs are associated with endogenous images. The study of shamanism in Miranda Aldhouse-Green’s and Stephen Aldhouse-Green’s (2005) monograph covers the European Upper Paleolithic, Neolithic, Bronze Age, Iron Age, Roman Empire period, and even later periods. The application of the neuropsychological model in early European art enables them to conclude that shamanism played a significant part in European Paleolithic hunter-gatherer communities, Neolithic farming societies, and Bronze Age and Iron Age cultures. Additionally, shamanic trance is also evidently represented in European classical art.

The combined research of ethnographic and cognitive science on Californian rock art has mainly been conducted by David Whitley (1994, 1998, 2000). His ethnographic analysis suggests that mental visions are responsible for the creation of rock art (Whitley 1998). Furthermore, he emphasizes the importance of the application of the neuropsychological model in understanding the rock art of California. He has given several reasons for this. First, the model “accounts for the variability in motif types, stylistic practice, and modes of rendering displayed by all traditions and variants of shamanic rock art” (Whitley 2000: 108). Second, the model results from laboratory research, thus “provides an independent scientific test of the verity of the rock art’s

ethnographic interpretation” (108). Third, the model provides “a realistic scientific explanation for all the various features of the art” (108). Mental images, generated from altered states, are expressed as metaphors of the supernatural in Californian rock art. According to recent neuroscience research, Whitley argues that the emotions of trance also play a very important role in the generation of mental imagery, thus in the creation of rock art. He has noted that many motifs in Californian rock art are related to death and killing, which may serve, in Whitley’s opinion, as metaphors of the supernatural experience. The death metaphor describes the ritual “dying” signifying the shaman’s entry into the spirit world during ASC, while the violence motifs such as animal-killing may portray “a complex metaphor intended to show that the shaman and his spirit helper alter ego committed an emotionally violent act of auto-sacrifice to enter the supernatural” (Whitley 1998: 31). Concerning Californian rock art, it is also worth noting Patterson’s research on Willow Creek petroglyphs (Patterson 1998). His comparative studies conclude that the Californian petroglyph image designs are similar to the entoptic visions derived from the laboratory experiments. His conclusion is supplied by several informants who claim that they are familiar with the entoptics because they have experienced similar images in their trance states.

The neuropsychological model has also been employed in studies of Australian and Siberian rock art. Kim Sales (1992) has identified entoptic visions in rock engravings in Northwestern Australia, and is confident that neuroscience can help us prompt our understanding of Australian ancient art and religion. Rozwadowski’s (2001) re-examination of “solar-headed” figures on petroglyphs of Central Asia strongly questions the earlier explanation which identifies these human icons as sun gods. Inspired by the neuropsychological model, he proposes that they are more likely to represent entoptic phenomena related to trance experience, rather than the unproven assumption of “sun gods.”

However, the neuropsychological model has been rejected by other scholars (e.g., Bahn 1988, 1997, 2001; Davis 1988; Quinlan 2000; Solomon 1997, 1999, 2001). The first argument against it is the so-called “ubiquitous-shapes” (Dronfield 1996: 375). That

is to say, there seem to be no clear criteria to differentiate what signs account for entoptic phenomena and what are not entoptics (Quinlan 2000: 92). Davis criticizes that the model interprets “anything and everything” as entoptic types (1988: 223). In Wallis’ word, “The mistaken equation was entoptic = shamanism” (2002: 736). The second flaw revealed is the universal nature. The model, which is derived from the cotemporary man’s structure of visual processing, evidently neglects time, space, and cultural particularity (Dronfield 1996: 376-377). The problem of the neuropsychological framework is “to build a generalized model of modern forager cosmological beliefs and religious practices to interpret the meaning of archaeological remains (McCall 2007: 225). Bahn (1997) argues that the model has a flaw with shamanic universality in forager societies because many modern hunter-gatherer communities do not practice shamanism. Furthermore, it is not plausible to accept that “the universality of the human nervous system and the range of experienced endogenous phenomena extend back throughout the evolutionary history of *homo sapiens* and across present-day cultural boundaries” (Dronfield 1996: 376).

Researchers who suspect the validity of the shamanic model are called “shamanophobes” by Wallis (2002: 736). They test shamanism theory in the studies of material cultures, such as rock arts, cave arts, and the other archaeological remains, which have also been examined by neuropsychological researchers, but have drawn diametrically opposed conclusions (e.g., Bahn 1997, 2001; D áz-Andreu 2001; Quinlan 2000; Solomon 1997, 1999, 2001). Quinlan, for example, has reexamined the ethnographic data from California and the Great Basin which Whitley has examined, and argues that “Direct or indirect ethnographic statements that shamans made rock art or depicted their vision imagery in rock art are very rare” (2000: 39). He states that there is not support from ethnographies for Whitley’s assumption that shamans record their visions in the rock art (98). Quinlan’s analysis, thus, suggests that “the ethnographies of far western North America provide scant support for a shamanistic interpretation of all prehistoric and historic rock art in this area” (102). Francfort’s (2001) study refers to Paleolithic art, rock art in Inner Asia and Bronze art of China Shang and Zhou period. He states that the neuropsychological theory, as a mechanical universality, is “very far from

being accepted” (2001: 249). Therefore, two questions need to be examined. The first: “is it possible to tell whether ancient art is a product of trance (or entoptic visions in ‘altered states of consciousness’)?” The second: “is there a necessary link between a given vision of the world (shamanism here) and an art or a style” (250)? He argues that there is no evidence to support that Paleolithic images are a production of trance or entoptic visions, as proposed by Lewis-Williams.

Due to the dissatisfaction with the neuropsychological model, some archaeologists began to employ animist ontology theory in replacing the general shamanism theory (including the neuropsychological model) to explore prehistoric shamanism (Borić 2007; Wallis 2009, 2013). These archaeological works have been inspired by the Amerindian perspectivism proposed by Viveiros de Castro (1998, 2004).

Amerindian perspectivism is regarded “as a label for a set of ideas and practices found throughout indigenous America” and, essentially, it refers to the Amerindian cosmology (Viveiros de Castro 2004: 5-6). This indigenous cosmology

imagines a universe peopled by different types of subjective agencies, human as well as nonhuman, each endowed with the same generic type of soul, that is, the same set of cognitive and volitional capacities. The possession of a similar soul implies the possession of similar concepts, which determine that all subjects see things in the same way. In particular, individuals of the same species see each other (and each other only) as humans see themselves, that is, as beings endowed with human figure and habits, seeing their bodily and behavioral aspects in the form of human culture. (Viveiros de Castro 2004: 6)

This new animist ontology is different from animism in the western evolutionary model, which proposed that indigenous peoples see all things in the world as animated and this animism “marks the origin of religion” (Wallis 2009: 51). Thus orthodox anthropology also sees indigenous humans as animals when they are “alleged to be primitive, uncultured, barbaric, inhuman, worldly or un-spiritual” (Harvey 2006: 99). Animist



ontology reveals that, in Amerindian cosmology, while humans see themselves as humans, animals and spirits also see themselves as humans. Animals have their own houses and villages, they perceive themselves as anthropomorphic beings, they own their specific culture, and they also organize their own social systems like humans (Viveiros de Castro 1998a: 470). These animals are hence called “non-human persons” (Pedersen 2001, 2007; Viveiros de Castro 1998a, 1998b, 2004) or “other-than human persons” (Harvey 2006; Wallis 2009, 2013).

Orthodox anthropology is founded on the conceptions of multiple cultures and one nature. However, Amerindian perspectivism differs from this cultural relativism and has proposed multinaturalism, namely one culture and many natures. The multiple cultures imply a diversity of subjective and partial representations. Because representation refers to the mind, multinaturalism has nothing to do with representations, but view the body as the central concept in explaining the differences between humans and non-humans (Viveiros de Castro 1998a, 1998b, 2004). Both humans and non-humans embody the same soul (a person), “but the site of main differentiation between different kinds of beings is the body” (Borić 2007: 89). In this way, as Viveiros de Castro sums up, the body “is an assemblage of affects or ways of being that constitute a *habitus*. Between the formal subjectivity of souls and the substantial materiality of organism there is an intermediate plane which is occupied by the body as a bundle of affects and capacities and which is the origin of perspectives” (1998a: 478).

This animist ontology theory is thus opposed to Western dualisms such as culture/nature, mind/body, humanity/animality, and subject/object, which dominate anthropological ontology (Harvey 2006; Viveiros de Castro 1998a; Wallis 2009, 2013). It is obvious that, in Amerindian perspectivism, the differentiation between culture and nature “is not a process of differentiating the human from the animal, as in our own evolutionist mythology. The original common condition of both humans and animals is not animality but rather humanity” (Viveiros de Castro 1998a: 471-472).

Drawing from Amazonian cosmology, Viveiros de Castro further points out that shamanism plays an essential role in the foundation of Amerindian perspectivism because

the shamans are specific humans who relate humans with the spiritual elements of non-humans (1998a: 472). Dušan Borić (2007) focuses on the body conception and shamanism proposed by Amerindian perspectivism and provides two case studies from the Mesolithic-Early Neolithic site of Lepenski Vir in southeast Europe and Çatalhöyük Neolithic site in south-central Anatolia. The hybrid images engraved on the sculpted boulders in the Lepenski Vir site are characterized by faces which mix human and animal features such as the human-fish motif. The best-known Çatalhöyük wall-art assemblage includes the plastic bucrania, the painted vultures with human legs, the painted humans ornamented with leopard skins, and humanoid bodies which appear to have a bear's head. All these images depict the non-mundane characters of the spirit world. In Borić's idea, these different hybrid bodies seem to represent different types of beings in the realm of animality which can only be seen by the shamans. The predator images on the Çatalhöyük walls may exhibit a constant negotiation between the human world and the animal realm. While focusing on the importance of the shamanistic explanations in the context of animality, Borić also emphasizes that negotiation between animality and humanity is more frequently placed in everyday life rather than in a shamanic consciousness. Thus, the rich productivity of hybrid images in prehistory, in Borić's idea, indicates that "in these societies the corporeality of the body was considered the most important source of agency and intentionality" (2007: 98).

For animist ontology theorists, animacy does not simply imply that spirits infuse into substances. Rather, it is a dynamic, transformative entity which is interwoven with beings of all kinds, because an environment to the world is always in flux. In this animist ontology, beings inhabit the world, but do not occupy it (Ingold 2006: 10). So "the inhabited world is comprised not of objects but of things" (Ingold 2010: 3). In the last decade, animist thinking on "object agency," "materiality" and "things" has been more frequently approached (e.g. Harvey 2006; Henare et al. 2007; Latour 2005; Santos-Granero 2009; Swancutt 2012). Based on such a perspective, some archaeologists have reconsidered archaeological artifacts, seeing them as dynamic, transformative things inhabiting the world rather than as animated objects (Vanpool & Newsome 2012; Wallis

2009, 2013). Combining ethnological analyses, Vanpool and Newsome (2012) provide an ontological approach on prehistoric pottery of the Casas Grandes region of the American Southwest and northern Chihuahua, Mexico. Drawing away from Cartesian dualism, Vanpool and Newsome see pottery as non-human beings, which served as active agents in a cosmological and ontological structure. The pot was thus a non-human person, which was transformed from formless clay and experienced a life history of birth, existence and death.

Relying on a new animist perspective, Wallis (2009, 2013) sees shamans as surpassing agents which are capable of negotiating between human and non-human persons. Based on “the importance of relationality and the permeability of boundaries between persons and things in shamanism,” (2013: 11), Wallis (2013) conducts an investigation of cave art at the Lascaux, rock art at Twyfelfontein, Namibia, and megalithic art in Northwest Europe. In Wallis’ argument, art objects are equated with humans and are seen as things and persons, manifesting their attempts to build up harmonious relations by negotiating between humans and non-human persons. Artifacts are not only engaged with human persons but are also engaged with other-than-human persons; not only present human meaning, but also the meaning of other-than-human beings. Meanwhile, art objects also resemble interconnected relational webs “of interactions between human people and other-than-human peoples as much as those between humans” (Wallis 2009: 55), and art images “act as nonhuman intentional agents themselves” (62).

To sum up, the neuropsychological model, as well as cognitive and structural theories, were built on anthropological dualism such as culture/nature, mind/body, inside/outside, and so on. These approaches hold that external representations (artifacts) derive from the internal mind (thought), ignoring any personhood embedded in materials and things. Thus humans are seen as unique and ultimate agents. In contrast, new animism ontology draws attention away from Western thought and brings us to indigenous perspectivism, in which both human persons and non-human persons are emphasized as agents in a web of interwoven cosmological relations.

### Summary

Cognitive archaeology was popularized by Renfrew and other scholars in the 1990s (e.g., Flannery & Marcus 1993, 1998; Mithen 1998; Renfrew 1994a, 1994b). The cognitive perspectives in studies of prehistoric religion and art constitute an important part of cognitive archaeology. Cognitive researchers attempted to find a way to identify the evidence of religious rituals and cults through examinations of archaeological indicators (e.g., Marcus 2007; Renfrew 1985, 1994b; Renfrew & Bahn 2000). Such approaches see material culture as information transmitters and the outcome of cognitive processes, but fail to explore the metaphorical meanings of symbolic systems (see Hodder & Hutson 2003; Thomas 2000: 180-182).

Structural archaeologists understand material culture as the manifestation of grammatical principles and hold that archaeological materials were coded with meaning (see Leach 1973; Pettit 1975). Many archaeologists believe that the production of prehistoric art was governed by binary structures (Campbell 2000; Hodder 1990; Leroi-Gourhan 1965, 1968, 1982, 1986; Tilley 1991). This structural approach has established a universal rule in exploration of archaeological materials, and material culture is thus seen as passive. The absence of elements of practice has led structuralists to overlook the historical and active role of material culture in social action (Bourdieu 1977; Giddens 1979; Hodder & Hutson 2003; Tilley 1989). The binary structure model, for example, totally ignores the temporal and spatial variables of artifacts (Conkey 1989).

The methodology for connecting archaeological data with anthropological theory in shamanism studies has been increasingly used by archaeologists since the 1970s. Lewis-Williams' neuropsychological model has constituted a famous debate in the archaeology of shamanism. The major problem with the neuropsychological theory is the use of laboratory data derived from contemporary man's visual processing so that the model fails to explore periodical and regional particularities. For the critics of this model, it is difficult to accept the universality of visual processing in the nervous system throughout human history from the Paleolithic period to today.

Whether cognitive theory, structuralism, or the neuropsychological model, all these theoretical approaches are deeply rooted in the Western dualism of culture/nature, spirit/material, and body/mind. Cognitive archaeologists, including neuropsychological researchers, simply hold that outside material culture is representative of the human mind. However, for other archaeologists, prehistoric material culture essentially represented a network of relationships between mind and materials. The body (mind) and the world are always interwoven and inseparable (see Ingold 2006, 2007, 2010; Thomas 1996).









### **Chapter 3 – An Archaeological Review of Prehistoric Art in the Bering Strait Region**

The so-called “Northern Maritime cultures” include Okvik culture, Old Bering Sea (OBS) culture, Punuk Culture, Birnirk Culture, and Thule culture. It covers the period between AD 100 and 1700. The people who represented Northern Maritime cultures are believed to be the ancestors of the modern Eskimos. They shared the same basic pattern of life with Eskimos who inhabit arctic and subarctic regions in today’s Northeastern Siberia, Alaska, Canada, and Greenland (Collins 1937; Fitzhugh & Crowell 2009). The economics, whether for prehistoric Eskimo and their Alaskan descendants, relied on hunting of sea mammals, fish, birds, and wild plants (Fitzhugh & Crowell 2009: 22). The artworks discovered in the Northern Maritime cultures are abundant. They are characterized by anthropomorphic and zoomorphic ivory sculptures and curvilinear designs on ivory hunting tools and other objects.

Anthropological investigations suggest that the historical Eskimo and Northern Maritime cultures shared similar material culture which was characterized by semi-subterranean houses; stone or clay lamps; hooded parkas made from furs, bird skins, and intestines; lithic tools, including ulu knives; toggling harpoon complex for sea mammal hunting; darts for bird hunting; snow goggles; and kayaks and umiaks for transportation on the sea. This maritime substance system was started by Okvik and OBS cultures in the Bering Strait region around 2000 years ago and continued to be developed by the Ipiutak, Punuk, Birnirk, and Thule cultures (Fitzhugh & Crowell 2009).

Among the above listed materials, winter houses had long been used by the Arctic Small Tool tradition (ASTt) in Alaska from approximately 2500 to 800 BC, much earlier than the Okvik and OBS cultures. ASTt was found from the Bering Sea side of the Alaska Peninsula to the coastal areas of Greenland, marked by the lithic tool kit of chipped end- and side-blades, burins, microblades, and burin-like grooving tools. The ASTt permanent settlements in Alaska were mainly found at Onion Portage on the Kobuk River, Howard Pass between the Noatak and Colville drainage in the Brooks Range, and

along the upper Naknek and Ugashic river systems on the Alaska Peninsula. ASTt people were salmon, bird, small sea mammal, and caribou hunters, but lacked technology to hunt large sea mammals (Dumond 1977, 1984). ASTt people are also called “Paleo-Eskimos” (Fitzhugh & Kaplan 1982: 243).

ASTt was followed by Norton tradition in the Alaskan coastal regions; the latter has been dated approximately from 500 BC to AD 100. Norton people started to use oil lamps, pottery, and increasingly polished slate. Similar to houses of ASTt, Norton winter houses were generally square with short, sloping entryways (Dumond 1977). Harpoon heads were found in Cape Denbigh, suggesting Norton people increasingly relied on sea mammal hunting (Giddings 1964). What needs to be noted is that both ASTt and Norton traditions have little artwork. A few engraved antler objects were found in Norton culture but they clearly differ from the craftsmanship of the Northern Maritime cultures, implying the latter cultures were not the former tradition’s successor (Auger 2005: 24).

The origin of Okvik/OBS culture has thus been an enigma in the archaeological studies of Bering Strait prehistory. Although similar maritime cultures had occurred previously in Southern Alaska and Kodiak Island, represented by Ocean Bay tradition (4000 - 2500 BC) and Kachemak tradition (2000 BC - AD 1100), they did not possess harpoon hunting tools and decorative art which represent the most striking features of Okvik and OBS cultures (Crowell 1988; Fitzhugh & Crowell 2009).

Archaeology of Bering Strait prehistory has revealed that the Okvik (OBS I), OBS, Punuk, Birnirk, and Thule cultures constituted a continuous cultural sequence during the period from AD 100 to 1700. Thule culture was firstly found in northwest Greenland and Eastern Arctic Canada by the Danish Fifth Thule Expedition of 1921-1924, led by Knud Rasmussen. In 1922, a cultural component was found by Therkel Mathiassen at the Naujan site in central Canada and the prehistoric phase represented by this site was named “Thule” (Mathiassen 1927). The Danish Fifth Thule expedition went across Arctic North America to the Bering Strait region, and the collected archaeological information finally led Mathiassen to conclude that Thule culture actually originated in Alaska to the west (Dumond 1998; Dumond & Bland 2002; Mathiassen 1927). In 1926,

Diamond Jenness, of the National Museum of Canada, excavated on Little Diomed Island and at Cape Prince of Wales on the Seward Peninsula. He first found OBS culture artifacts on the Little Diomedes Island and gave a name “Bering Sea culture” (Jenness 1928), which was modified as “Old Bering Sea culture” later by Henry Collins (1937). Also in 1926, Otto Geist visited St. Lawrence Island and purchased a large numbers of artifacts from local Yupik people, which included many OBS artifacts (Dumond & Bland 2002). In 1928, Collins conducted an excavation on one of the Punuk Island and identified a culture assemblage which he named “Punuk culture.” In 1930 and 1931, Collins and his crews excavated sites at Gambell on St. Lawrence Island. According to an analysis of the styles of uncovered artifacts, he identified three styles of OBS culture which were earlier than the Punuk culture: OBS I, II, and III. He thus set up a cultural sequence from OBS culture to Punuk culture (Collins 1937). In 1936, Collins excavated the Wales site, which was first excavated by Jenness in 1926. This excavation made Collins believe that Punuk culture had a close relationship with Birnirk and Thule cultures (Dumond & Bland 2002). From 1931 to 1935, Geist excavated the Kukulik site on St. Lawrence Island. This site contains multiple cultural layers including the OBS, Punuk, Thule and historical Yupik cultures. With Froelich Rainey, Geist provides an analysis which strongly supports Collins’ cultural sequence (Geist & Rainey 1936).

In 1931 and 1934, Geist excavated a site which was later named “Okvik,” one-half mile east of the village site excavated by Collins in 1928. This archaeological investigation revealed the earliest culture of the Northern Maritime tradition: Okvik culture (Rainey 1941a).

From 1939 to 1941, Helge Larsen, Rainey, and J. Louis Giddings excavated the Ipiutak site at Point Hope and discovered the “Ipiutak culture” which is different from the cultural sequence on the St. Lawrence Island. The most distinct feature of the Ipiutak culture is its lack of typical prehistoric and historical Eskimo materials such as counterweights, ulu knives, and pottery (Larsen & Rainey 1948). More Ipiutak sites were found on the Kotzebue Sound coast and inland areas since the 1950s until today (Mason 1998). Since the Ipiutak culture had similar economic styles and lithic technologies,

several archaeologists are inclined to consider Ipiutak culture as a developed phase founded on the Norton tradition (Collins 1973; Dumond 1977; McGhee 1976; Rainey 1941b, 1971).

According to the archaeological reports of the major and best-known excavations, this chapter offers a review of the material culture of this Northern Maritime tradition, especially an examination of its artistic artifacts.

The definitions of Okvik culture, OBS culture, Punuk culture, Birnirk culture, Thule culture, and Ipiutak culture were given mainly in terms of the artistic style and the forms and styles of major hunting implements such as harpoon heads and harpoon counterweights. The examinations of art designs and typology of artifacts are the focus in the following narratives.

### **Okvik Culture**

As the earliest Northern Maritime culture, Okvik Culture (AD 100-400<sup>9</sup>) emerged at the end of the first millennium BC or the beginning of the first millennium AD in the coastal region of Chukotka and on the islands in the Bering Sea. It was first found in Okvik site on Punuk Islands, adjacent to St. Lawrence Island, which was excavated in 1931 and 1934 by Geist, who represented the Alaska College of Agriculture and School of Mines (now the University of Alaska Fairbanks) (Rainey 1941a). When so-called “Okvik site” was discovered, the Eskimo language had no name for it. It was hence called “Old Punuk” by excavators who wanted to use this name to distinguish this newly discovered site from the other site on the Punuk Island excavated by Collins in 1928 (Rainey 1941a: 465). When having realized that the “Old Punuk” assemblage actually preceded the OBS and Punuk stages, Rainey feels that the term “Old Punuk” is easier to be confused and thus proposes to use the name “Okvik” to replace “Old Punuk”. This revised name,

---

<sup>9</sup> The chronological data about Okvik culture, OBC culture, Ipiutak Culture, Punuk Culture, Birnirk Culture, and Thule Culture have been widely debated (see Gerlach & Mason 1992), but for the sake of clarity, are defined here from Dumond (2009).

“Okvik,” was suggested by St. Lawrence Eskimos, meaning “many walrus hauled up on land” (467).

Okvik culture was also found on St. Lawrence Island and Little Diomed Island. In 1930 and 1931, Collins, an archaeologist representing the National Museum of Natural History, excavated at the four Gambell-area sites and discovered that Hillside site, one of them, contains similar culture to the Okvik site. The excavated remains at Hillside include two houses (House 1 and House 2) and adjacent middens. This assemblage was considered the earliest culture on the St. Lawrence Island and was identified as “Old Bering Sea culture I” (Collins 1937). In 1939, Giddings excavated the third house in Hillside site. In the report of Okvik site, Rainey equated the Okvik material with the material from House 3 at the Hillside. As he has described, “It is clear that this large house on the hillside at Gambell represents the same culture stage as the Okvik deposit on the Punuk Islands” (1941a: 472). Rainey further speculates that the materials from House 3 at the Hillside and the Okvik site are older than those excavated by Collins from House 1 and 2 at the Hillside, because Collins’ decorated specimens include both “the typical elaborate curvilinear style of the Old Bering Sea State proper” and “the simpler Okvik style” (472).

Among three objects reported by Jenness (1928) from the collection of Little Diomed Island, two are identified by Collins (1937) as OBS style II or III and the third is identified as Okvik. Morrison (1991) later reported more ivory and bone objects of Jenness’ collection and he has identified several harpoon heads and other objects of Okvik form and engraving style. Additionally, Collins’ Gambell report (1937) also includes several artifacts obtained from Little Diomed Island. Of them, one socket piece and two decorated harpoon heads are identified as Okvik or OBS I form.

On the Siberian side of the Bering Strait, traces of Okvik culture can be seen at the coast from Uelen to Chaplino. Artifacts in the decorative forms of the Okvik and the Collins’ OBS style I have been found in both the Uelen and Ekven cemeteries (Arutiunov & Bronstein 1985; Arutiunov & Sergeev 2006[1969], 2006 [1975]; Dikov 2004[1979];

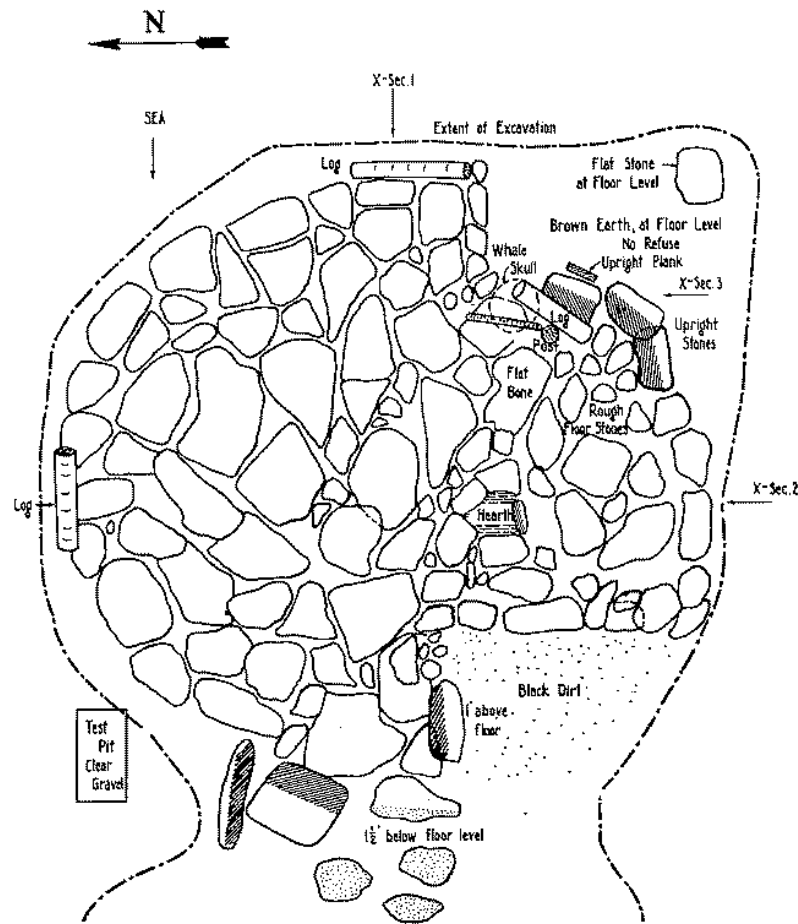
Dumond 1998). Dikov has concluded that the Okvik culture can be “considered one of the earliest and best known maritime cultures in Chukotka” (2004[1979]: 135).

Whether the Okvik culture is synonymous with OBS I is a famous debate in the archaeology of the Bering Strait region. While most American scholars combine Okvik and OBS I as the same culture (Collins 1937; Dikov 2004[1979]; Fitzhugh 2009b; Rainey 1941a; Rudenko 1961), others argue that the Okvik and OBS I are different entities and believe that the Okvik might be later than the earlier OBS phase (Arutiunov & Sergeev 2006[1969], 2006 [1975]; Bronshtein 2006). Robert Ackerman (1984) and Dumond (1977, 1998), however, conclude that the Okvik and the OBS are different, localized cultures but are roughly contemporaneous. Based on the fact that both Okvik and OBS I are the earliest phase of the Northern Maritime Eskimo tradition, and both share the same economic style, cultural pattern, and materials, and the regional variants in their art styles of engraving are much smaller than the discrepancy between Okvik/ OBS I and OBS II/III, this research adopts the former argument, which sees Okvik and OBS I as the same culture.

House 3 in the Hillside site, which was excavated by Giddings in 1939, demonstrates that the Okvik people used permanent subterranean or semi-subterranean structure. It is a large round house with eighteen feet diameter, flat stone floor, an entrance passage, an open hearth, and a platform. Some timbers such as logs, poles, and flanks were found in the structure (Figure 5). The round form resembles the Thule type of house in the eastern Arctic (Rainey 1941a: 468-472).

Numerous excavated artifacts have revealed that the Okvik ancestors lived on hunting of sea mammals such as walrus, seal, and whale; land mammals such as caribou and bear; fish; and birds. Chipped stone tools include knives, projectile points, side blades, and drills, and the ground stone tools include adze, ulu blade, and men’s knife blade. Ivory, bone, and antler were largely utilized to make tools. These include harpoon parts such as harpoon head, socket piece, foreshaft, counterweight, and ice pick for hunting sea mammals; arrow heads for hunting land animals; multi-pronged spear for hunting birds; fish hook and multi-pronged dart for fishing; blubber scraper for sea

mammal blubber collecting; and other daily-used tools such as drills, awls, needles, needle cases, and mattocks (Ackerman 1984; Dumond 1998).



**Figure 5. House 3 of the Hillside site, St. Lawrence Island.** After Rainey 1941: 469, Fig. 2.

Researchers have paid a lot of attention to the studies of harpoon head types of the Northern Maritime cultures, and regard harpoon head types as one of major indications to distinguish different cultures (e.g., Collins 1937; Ford 1959; Geist & Rainey 1936; Mason 2009b; Lewis 1995; Rainey 1941a; Stanford 1976). Rainey classifies harpoon heads from the Okvik site in five major types: A, B, C, D, E. Type A and C are characterized by the open foreshaft socket; the difference of Type A and C is that the

blade slit of the former parallels to the axis of the line hole but the blade slit of the latter is at right angles to the line hole (Figure 6-1, 6-2, 6-5). Type B and D are featured by the close foreshaft socket. However, the blade slit of Type B parallels to the axis of the line hole but the blade slit of Type D is at right angles to the line hole (Type 6-3, 6-4, 6-6, 6-7). Type E is a very small group with only 6 specimens. Its striking feature is its side blades set in opposing grooves which are parallel to the axis of the line hole (Figure 14-1). Most harpoon heads are typical tools for walrus and seal hunts. Only one broken specimen with fore head remaining, decorated with curved and spurred lines in Okvik style, is identified as a whaling harpoon head (Rainey 1941a: 476-487) (Figure 7).

Many of the ivory and bone artifacts from Okvik culture were engraved with decorative designs. I have recorded data from 133 decorated artifacts (the human and animal figures are not included) among collection of the Okvik site for this dissertation research, including measurement and photograph<sup>10</sup>. These artifacts are harpoon heads (Figure 6), counterweights (Figure 10; Figure 11), socket pieces, harpoon rests for Kayaks, float plugs, boat hook barbs, dart heads, side prongs for bird darts, snow goggles, blubber scrapers, ulu handles, men's knife handles, cups, wedges, needle cases, fasteners, buttons, pendants, and many unidentified implements. The basic geometric elements include spurred, broken, dotted, detached, radiating, and converging lines, and some circular (or elliptical) forms. Collins (1973) has categorized engraved designs of Okvik culture in three sub-styles:

In sub-style A, assumed to be the oldest, the decoration consisted mainly of thick, deeply cut, straight or slightly curved lines to which long slanting spurs were attached. This decoration was applied consistently to a particular type of harpoon head that was very thick, almost square in cross section. Sub-style B, a more delicate style, was applied with equal consistency to two other types of harpoon heads that were very thin in cross section. Its most typical motifs were lightly incised, straight,

---

<sup>10</sup> The Okvik site not only contains artifacts of Okvik phase, but also a few numbers of artifacts of OBS and Punuk phase. However, all artifacts from the Okvik site described in this section belong to Okvik phase.



rather short slanting lines, three or more of which often converged to form a tent-like figure; longer single or double lines with tiny spurs attached; broken lines; combinations of heavy and light lines, the heavier line being flanked by one or two lines and/or broken lines; small circles with central dot set between two or three pairs of lightly incised lines forming long sharp spurs; plug inlays in circular pits representing eyes.

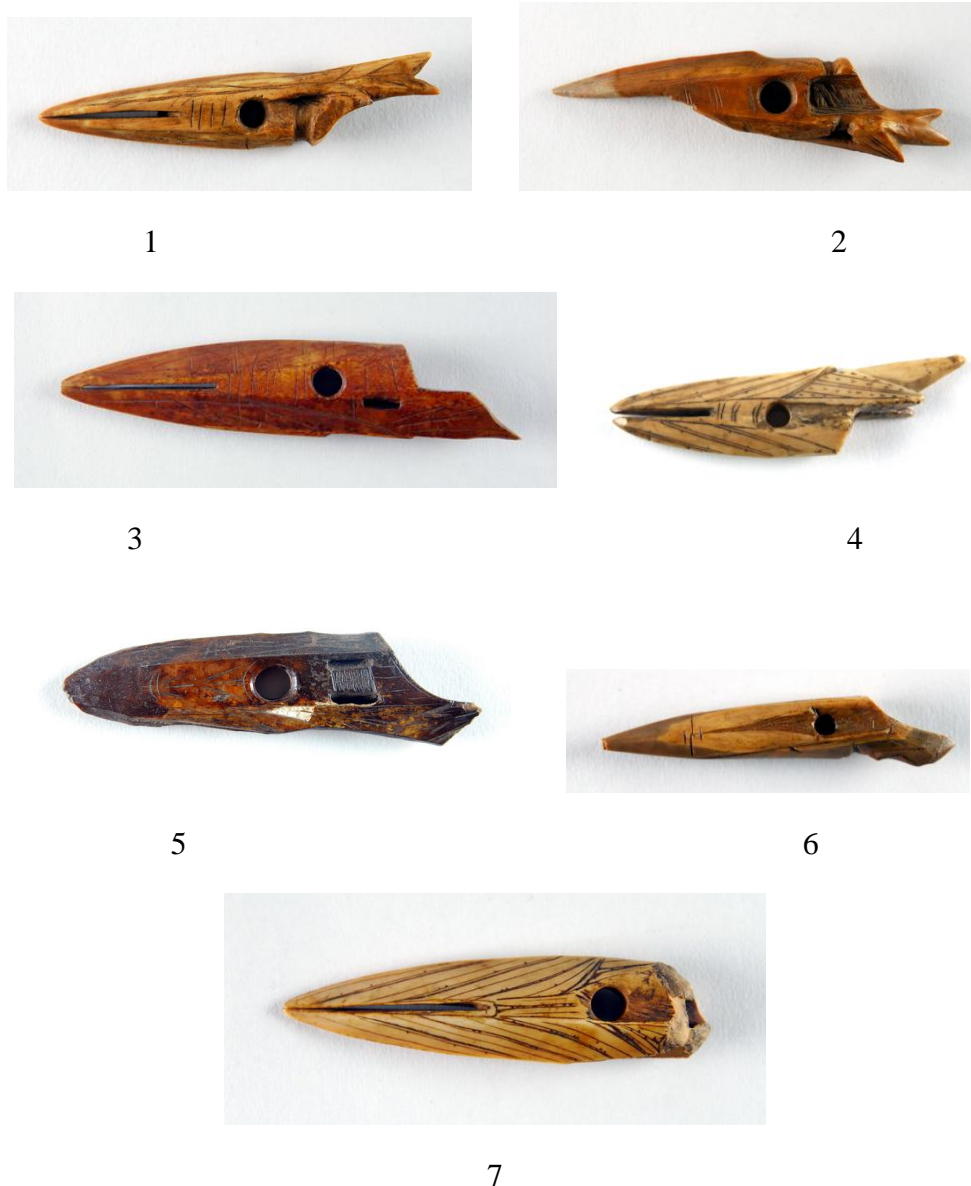
....

Style C, the most elaborate of the Okvik sub-styles, was characterized by a profusion of long, straight, single or double lines to which tiny triangular spurs, often in pairs, were attached at carefully paced intervals. The narrow space between such lines often contained tiny spurs, small hatched areas, or straight cross lines forming a kind of ladder design. These spurred lines of Okvik style C were usually arranged in converging fashion to form a tent-like design, with a small circle at the apex. It is an elaboration of the simpler converging line motifs of styles A and B, and it continued as one of the most common designs of later Old Bering Sea and Punuk art. (pp. 3-4)

In the excavation report of the sites at Gambell, Collins (1937) illustrates 20 principal decorative motifs of Okvik/OBS I culture (Figure 8), and this motif plate has widely been cited by later researchers (e.g., Auger 2005; Dumond 1998).

From my observation of the engraved artifacts, it is difficult to conclude if Collins' style A is older than style B. Rainey comments that Okvik decoration designs "are much simpler, more sketchy, more irregular, and less pleasing than the complex curvilinear designs of the Old Bering Sea stage" (Rainey 1941a: 551). He seems to illuminate that Okvik and OBS decoration designs experienced an evolutionary process from a "simpler" and "less pleasing" stage to a more complex and more pleasing stage. However, while some ivory objects such as harpoon heads were decorated with simple, sketchy, and random straight or curved lines, the extremely fine design structured by lines and circles were also present. We do not have evidence to conclude that the simpler design might be older than the more complex and more pleasing design. Two situations

might coexist in Okvik phase. Collins has also realized that the decorative scheme of Okvik/OBS I “is well organized and balanced, although the execution is somewhat free” (1937: 46).

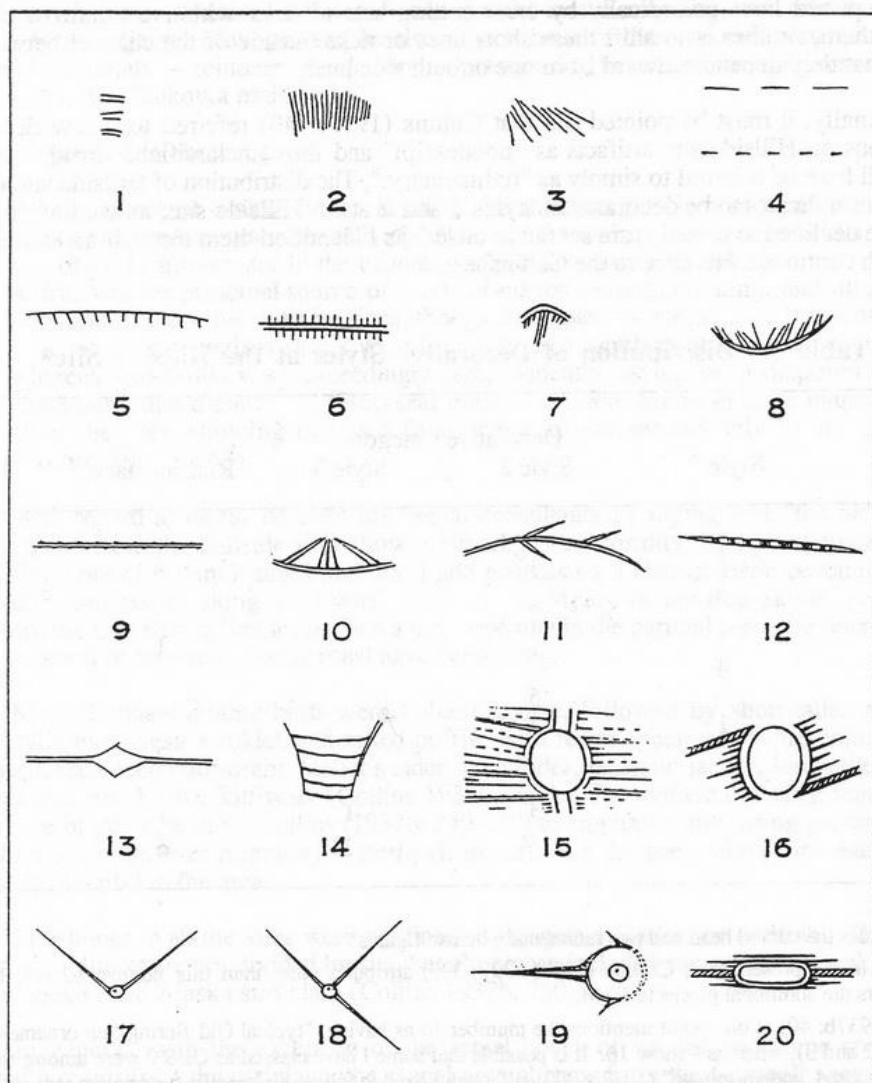


**Figure 6. Harpoon heads from Okvik site.** UAMN collection. 1. 4-1934-0346, Type A, 7.7 cm length. 2. 4-1934-0340, Type A, 9.6 cm length. 3. 4-1934- 0339, Type B, 11.6 cm length. 4. 4-1934-0675, Type B, 8.0 cm length. 5. 1-1931-0756, Type C, 9.9 cm length. 6. 1-1931-0771, Type D, 7.1 cm length. 7. 1-1931-1083, Type B, 9.0 cm length. Photograph by Feng Qu.



**Figure 7. Whaling harpoon head from Okvik site.** UNMA collection. 1-1931-0757, 7.5 cm length. Photograph by Feng Qu.

UAMN Specimen 4-1934-0340 (Figure 6-2), an ivory harpoon head of Rainey's style A, for example, is decorated with a simple straight long line and three groups of slightly incised short lines. Specimen 4-1934-0339 (Figure 6-3), an ivory harpoon head of Rainey's style B, is engraved with random, sketchy straight or slanting lines, showing a simpler form. In contrast, UAMN specimen 1-1931-1083 (Figure 6-7) bears a harmonious design which is composed of straight and slightly parallel, curved, long lines. Specimen 1-1931-0997 (Figure 9), possibly an ivory arrow straightener, uses ladder-like form to encircle the central hole of the round head, forming a pleasant design. Its handle is decorated with a more complex design on two sides, composing of deeply incised straight lines, long sharp spurs, and a large round circle, combining numerous light straight lines.



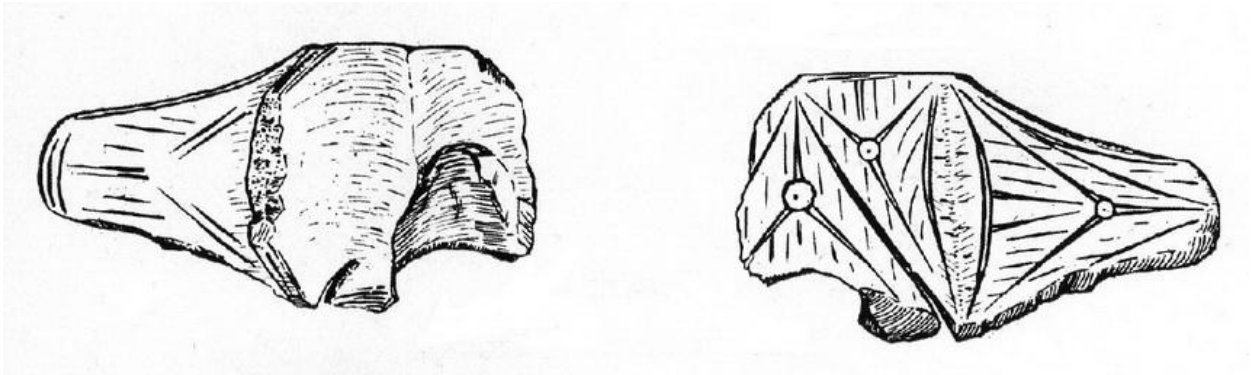
**Figure 8. Decorative motifs of Okvik/OBS I culture.** After Collins 1937: 47, Fig. 6.



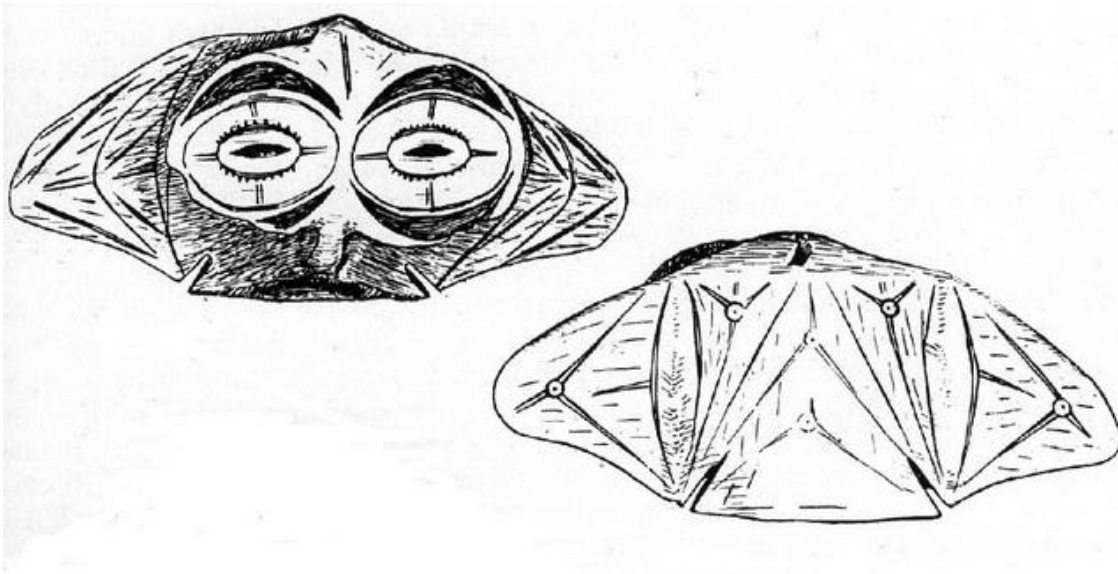
**Figure 9. Ivory arrow straightener from Okvik site.** UAMN collection. 1-1931-0997, 8.8 cm length. Photograph by Feng Qu.

The geometric designs of Okvik culture are usually used to decorate sea mammal hunting tools and implements related to sea mammal processing. Total 217 harpoon heads (208 ivory, 9 bone) were reported in Rainey's monograph (1941), and 185 of them are decorated with the Okvik designs. 5 counterweights were found in the Okvik site, and all are decorated. The decorated designs on the counterweights are more complicated than those on other hunting tools such as harpoon heads. Two specimens are engraved with multiple long sharp spurs, which are composed of small circles with central dot set between three pairs of lines (Figure 10). UAMN Specimen 1-1931-0996 (Figure 11) has two V shape cuts on both wings. On the face side, the single or double straight or curved lines are converging to form several groups of tent-like designs, and a double-lined circle

with a central dot is arranged at the center of the plate. The back side of the counterweights is decorated with crude ladder-like designs.



1



2

**Figure 10. Counterweights from Okvik site.** After Rainey 1941: 520-521, Fig. 26.



**Figure 11. Counterweight from Okvik site. UAMN collection. 1-1931-0996, 8.5 cm length. Photograph by Feng Qu.**

Most of the sea mammal processing tools such blubber scrapers and ulu handles have elaborate geometrical designs. The exterior of blubber scrapers are usually decorated with paired longer lines attached with numerous tiny tooth-shaped tickings (Figure 12). Ulu handles are often engraved with radiated curved lines (Figure 13).

One of the major motifs in Okvik culture is the concentric circle (or ellipse). The frequent paired circles in OBS culture often form the best-known eye-like motifs. However, the paired circles potentially symbolizing eyes only has a few samples, and most circle designs are singular (Figure 14). UAMN specimen 1-1931-0803 is an unidentified ivory object (Figure 15), purchased by Rainey from a native but said to be from the Okvik site (Rainey 1941a: 538). There are two drill holes connecting a long groove inside of the object. Two double-lined circles beside the groove may represent eyes. Many singular circles are decorated with strait and curved lines. Specimen UAMN 1-1934-0698 (Figure 14-3) is a dart head possibly for sealing, mainly decorated with single or double strait or slightly curved lines. A single ellipse is placed on the back of the dart head. UAMN Specimen 4-1934-0672 (Figure 14-2), a harpoon head with broken fore part, can be seen with two concentric circles combining sharp spurs. UAMN Specimen 1-1931-0793 (Figure 14-4), a boat hook barb, is decorated with converging lines and a large concentric circle at the center. UAMN Specimens 4-1934-1180 (an unidentified ivory object, Figure 16-1) and 1-1931- 1091 (ivory wedge, Figure 16-2), are both incised with a nucleated circle with radiated lines. These singular circles are



obviously not related to eye motif. UAMN Specimen 4-1934-1804 (Figure 17-1), possibly a foreshaft for a dart, is decorated with a pair of circles with central dots on one end of the object to represent an animal's eyes.



1



2



3

**Figure 12. Blubber scrapers from Okvik site.** 1. UAMN 1-1931-0818, 11.8 cm length. 2. UAMN 1-1931-0812, 10.2 cm length. 3. UAMN 1-1931-0810, 9.8 cm. Photo graph by Feng Qu.





1



2

**Figure 13. Ulu handles from Okvik site.** 1. UAMN 4-1934-1201, 8.0 cm length. 2. UAMN 1-1931-0992, 11.5 cm length. Photograph by Feng Qu.



1



2



3



4

**Figure 14. Ivory artifacts from Okvik site. UAMN collection. 1. 4-1934-0360, harpoon head, Type E, 7.9 cm length. 2. 4-1934-0672, harpoon head, 6.7 cm length. 3. 1-1934-0698, dart head, 6.3 cm length. 4. 1-1931-0793, boat hook barb, 8.8 cm length.**



**Figure 15. Unidentified ivory object from Okvik site.** UAMN collection. 1-1931-0803, 12.5 cm length.



1



2

**Figure 16. Ivory artifacts from Okvik site.** UAMN collection. 1. 4-1934-1180, unidentified object, 11.6 cm length. 2. 1-1931- 1091, wedge, 10.2 cm length.



1

2



3

**Figure 17. Ivory artifacts from Okvik site.** UAMN collection. 1. 4-1934-1804, dart foreshaft (?), 7.2 cm length. 2. 4-1934-1187, unidentified object, 5.2 cm length. 3. 4-1934-1175, unidentified object, 9.4 cm length. Photograph by Feng Qu.

The realistic eyes were expressed by the Okvik people on several samples. UAMN specimen 4-1934-1187 (Figure 17-2) is an unidentified ivory object in the shape of a flat plate. It is engraved with irregular lines and a pair of crude-incised eyes. UAMN Specimen 4-1934-1175 (Figure 17-3), an elongated T shape ivory object, is decorated with a representation of human eyes on one end. According to Rainey's report (1941a: 520-521), a counterweight has a pair of realistic eyes engraved on the central section (Figure 10-2). Unfortunately, this artifact is missing in the collection of the Okvik site in UAMN.

According to my observation of the collection of the Okvik site, the frequently decorated artifacts are related to sea mammal hunting or processing. The artifacts used for sea mammal hunting include harpoon heads, harpoon socket pieces, counterweights, harpoon rests, dart heads for sealing. In contrast, the tools for bird hunting and fishing, including end prongs, arrowheads (possibly for warfare), barbs for salmon spears, fish hooks, fish hook barbs, fish line sinkers, have rare or no decorations. The implements for processing tools such as men's knife handles, ulu handles, and blubber scrapers, are frequently decorated artifacts. However, other tools and implements, such as picks, mattocks, wedges, and shovel heads, have rare or no decorations. This phenomenon demonstrates that the Okvik decorated design has symbolic significance in sea mammal hunting and processing.



**Figure 18. Antler Arrowhead from Okvik site.** UAMN collection. 4-1934-534, 12.1 cm length. Photograph by Feng Qu.

There are twenty eight arrowheads which were found in the Okvik site, among them is a type of arrowhead made from antler with a blade slit and two long slender barbs. They are all incised with long longitudinal lines, much different from the common Okvik decorative designs. The incised lines are distinguished with those elaborate designs (Figure 18). For this reason, the definition of decorative design in this research does not include this simple longitudinal line.

Numerous human and animal ivory figures have been found in Okvik culture. There are, in total, 45 human sculptures reported by Rainey (44 ivories and 1 wood). Okvik anthropomorphic figurines are usually characterized by “the stylized form of the head and face” and the long and oval faces “with narrow pointed chin and very long strait nose” (Collins 1977: 4). What needs to be noted is that the bodies of most human figures were also incised with geometric designs similar to those designs found on the harpoon parts and other tools and implements. The human figurines include both genders and the female and male genitalia were usually well carved. Normally, while the facial features are carefully indicated, the body is made in shape of a rectangular block without arms and legs (Collins 1977: 3-5; Dikov 2004: 135-146; Rainey 1941a). Some faces are incised straight or broken lines indicating tattoo markings (see Krutak 2009) (Figure 19-1).

UAMN Specimen 4-1934-1209 (Figure 20-1) is a typical doll in Okvik style. The eyes are indicated on the much higher top of the oval head to give space to the elongated nose. The rectangular torso has no arms or legs indicated. 4-1934-1203 (Figure 20-2) is a long pointed head with tattoo markings on the cheeks. 4-1934-1202 (Figure 20-3) is a much smaller doll which also has a long nose on the oval head.

Some human heads are obviously broken from their torsos (Figure 19), while some torsos have missing heads and the broken mark remains (Figure 21, Figure 22). UAMN Specimen 1-1931-0839 (Figure 19-2) is a doll head, broken from a missing torso. The squinted eyes with eyebrows, long nose, ears, and mouth are indicated on the egg-shaped head. Ears are indicated by small protuberances and a long line extends to the ears indicating the mouth. Specimen 1-1931-0826 (Figure 21-3) is a torso without head, in shape of a rectangular block, engraved with elliptical designs. Specimen 1-1931-0985

(Figure 22) is another head-missing doll and its body is fully decorated with curved lines. The lower half of the body back is carved in a sunken shape with a central drill hole, demonstrating this doll actually is a fire-making implement. The sunken part is engraved with concentric ellipses encircling the hole, implying that the decoration has a mysterious relation with fire making. UAMN specimens 1- 1931-0827 (Figure 21-4) and 1-1931-0987 (Figure 21-2) are also dolls used as fire making implements.



1



2



3

**Figure 19. Ivory dolls from Okvik site. UAMN collection. 1. 1-1931-0840, 6.0 cm height. 2. 1-1931-0839, 5.3 cm height. 3. 1-1931-0966, 6.3 cm height. Photograph by Feng Qu.**





**Figure 20. Ivory dolls from Okvik site.** UAMN collection. (From left to right) 1. 4-1934-1209, 9.8 cm height. 2. 4-1934-1203, 6.7 cm height. 3. 4-1934-1202, 3.8 cm height. Photograph by Feng Qu.





**Figure 21. Ivory dolls from Okvik site.** UAMN collection. 1. 1-1931-0837, 18.5 cm height. 2. 1-1931-0987, 14.5 cm height. 3. 1-1931-0826, 12.3 cm height. 4. 1-1937-0827, 9.1 cm height. Photograph by Feng Qu.



**Figure 22. Ivory doll from Okvik site.** UAMN collection. 1-1931- 0985, 14.6 cm height.  
Photograph by Feng Qu.



**Figure 23. Ivory dolls from Okvik site.** UAMN collection. 1. UA-171-0009-0001, 17cm height. Photograph by Brian Allen. 2. Okvik “Madonna,” 4-1934-0607, 17.6 cm in height. Photograph by Brian Allen.



**Figure 24. Ivory animal figures from Okvik site and Hillside site. UAMN collection.**  
 1. 4-1934-0695, seal head, from Okvik site, 8.1 cm length. 2. 1-1931-1050, seal image, from Okvik site, 5.1cm length. 3. 4-1934- 0611, bird head, from Okvik site, 10.3 cm length. 4. 1-1931- 0809, whale image with human face, from Okvik site, 8.8 cm length. 5. UA74-066-0013, bear (or dog) image, from Okvik site, 7.1 cm length. 6. 2-1935-1397, monster face, from Hillside site, 11.3 cm length. 1-4 & 6, photograph by Feng Qu. 5, photograph by Brian Allen.

UAMN Specimen UA-71-0009-0001 (Figure 23-1) is a doll collected by Brian Rookok in 1970 and purchased by UAMN in 1971, said to be from the Okvik site. Same as the other Okvik dolls, it has a pointed head, carefully indicated eyes, mouth and long nose, and tattoo markings on the face. It does not have arms but has legs. The indication of breasts and female genitalia demonstrate its female status. The whole torso is engraved with typical Okvik designs characterized by straight, curved, or cut lines, sharp spurs, circles, and ellipses.

The most famous human figure in Okvik culture is the so-called “Okvik Madonna,” cataloged as 4-1934-0607 in UAMN (Figure 23-2). It represents a woman holding a child (or a bear cub) with her hands. The entire body is decorated with bands of incised lines. A twisted smile is represented. Its original legs have been broken away. In Collins’ comment, “the artist has achieved a facial expression of both serenity and animation, a Madonna-like quality that marks it as one of the superior achievements of Eskimo art” (Collins 1969: 125). This specimen was purchased by Commander F. A. Zeusler, United States Coast Guard, in 1939 (Rainey 1941a: 522).

Zoomorphic figurines include images of dogs, polar bears, whales, seals, walrus, and birds (Figure 24). Almost all animal heads are the attachments of some implements or parts of implements (Rainey 1941a: 552). UAMN specimen UA74-066-0013 (Figure 24-5) is an ivory dog or bear head with open mouth and fangs. The single or double incised lines form a design on the surface. Two socket holes are also regarded as the animal eyes. Specimen 4-1934-0611 (Figure 24-3), possibly a base part broken from an ivory snow beater handle, is carved in shape of a bird head. Specimen 4-1934-0695 (Figure 24-1) is also a broken ivory handle base, carved in a seal head. Specimen 1-1931-0809 (Figure 24-4) is a whale carving but with a human face. Above the whale eyes, nostrils, and mouth are carefully indicated with human eyes, nostrils and mouth. Specimen 2-1935-1397 (Figure 24-6), an ivory socket piece excavated from Hillside site by Geist in 1935, shows a monster face with indicated eyes and nostril (also see Wardwell 1986: 60).

### **Old Bering Sea Culture**

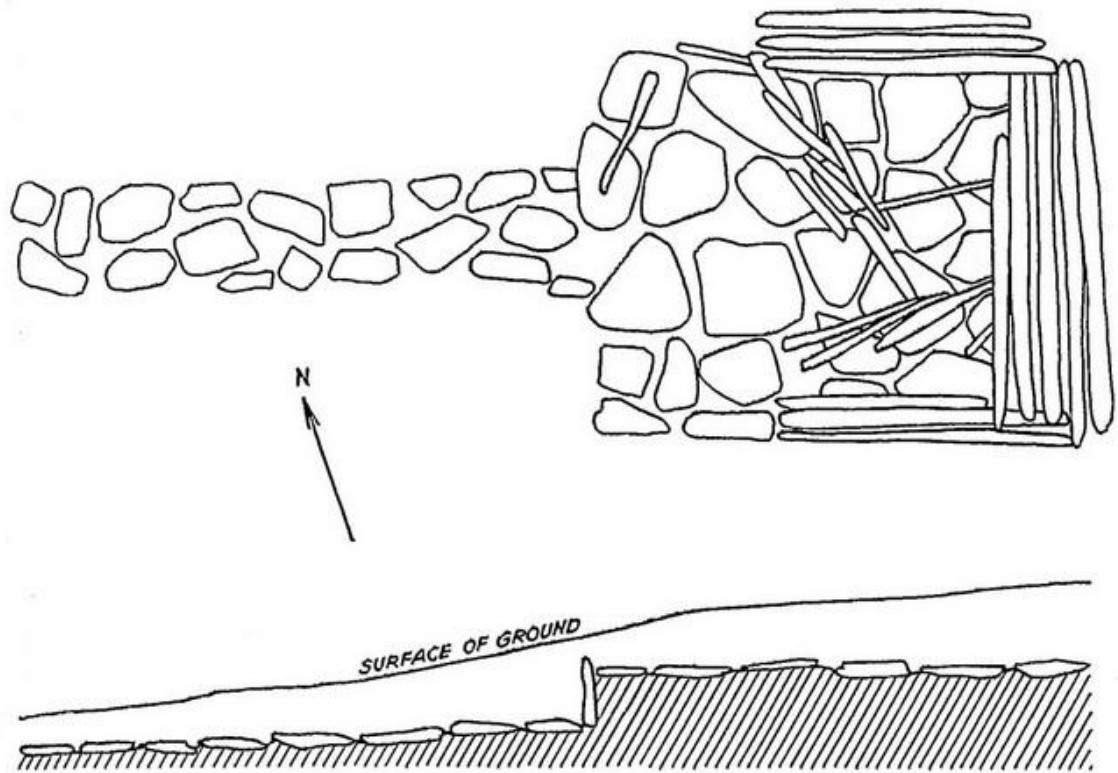
The Old Bering Sea culture in this dissertation equates the phase of Collins' OBS style II and style III. In Collins' initial definition, style III was developed from style II, and the formula from Okvik/OBS style I to style II and III is assumed to be an evolutionary sequence (Collins 1937, 1973). In his words, "OBS style III is essentially a modification and simplification of the more variable style II" (Collins 1973: 6). However, the later radiocarbon dating analyses has revealed that OBS II and III are actually contemporary in the AD 400 - 800 range (Dumond 2009; Fitzhugh 2009b).

There are large numbers of OBS sites, which were found on the islands of St. Lawrence and Diomedé and in Chukotka Peninsula. The best known archaeological investigations include Collins' excavation at Gambell, Geist's excavation at the Kukulik site, and Russian archaeologists' work on the Uelen cemetery and the Ekven cemetery. This section mainly integrates data from my observations of Kukulik collection in the University of Alaska Museum of the North and archaeological reports of the above sites (Arutiunov & Sergeev 2006[1969], 2006 [1975]; Collins 1937; Geist & Rainey 1936).

Collins' ethnological and archaeological investigations on St. Lawrence Island began in 1928 and continued in the summers of 1929 and 1930, including excavations on the eastern and western ends of the island. In 1930, Collins represented Smithsonian Institution to conduct excavations on the sites at Gambell, the northwestern end on the island, which include the Hillside site, Miyowagh site, Ievoghiyoq site, Seklowaphyaget site, and old section of Gambell. In 1931, although Collins was absent at Gambell, his crew continued the excavations in his name. The two years' excavations result in Collins' archaeological report (Collins 1937).

Although some Okvik artifacts were found in House 1 and 2 at the Hillside site, the two houses are more likely to represent the OBS semi-subterranean structures. In comparison with Punuk culture, OBS houses are relatively small like the Okvik style. They are usually square to rectangular, with stone floor, long entrance passage, and walls

made of horizontally laid timbers (Collins 1937: 260). House 2 has a width of 3 meters, a length of 4.1 meters, and its entrance is about 4.6 meters in length (40) (Figure 25).



**Figure 25. Plan and section of House 2 of the Hillside site at Gambell, St. Lawrence Island.** After Collins 1937: 39, Fig. 3.

Geist began his ethnological and archaeological research on St. Lawrence Island in 1926. During the years from 1926 to 1929, funded by Charles E. Bunnell, the president of the Alaska Agricultural College and School of Mines, Geist visited Gambell and Savoonga, as well as other places on the island. A huge numbers of artifacts were purchased and collected by Geist from the native diggers, and this collection led to the foundation of the University of Alaska Museum (Geist & Rainey 1936).

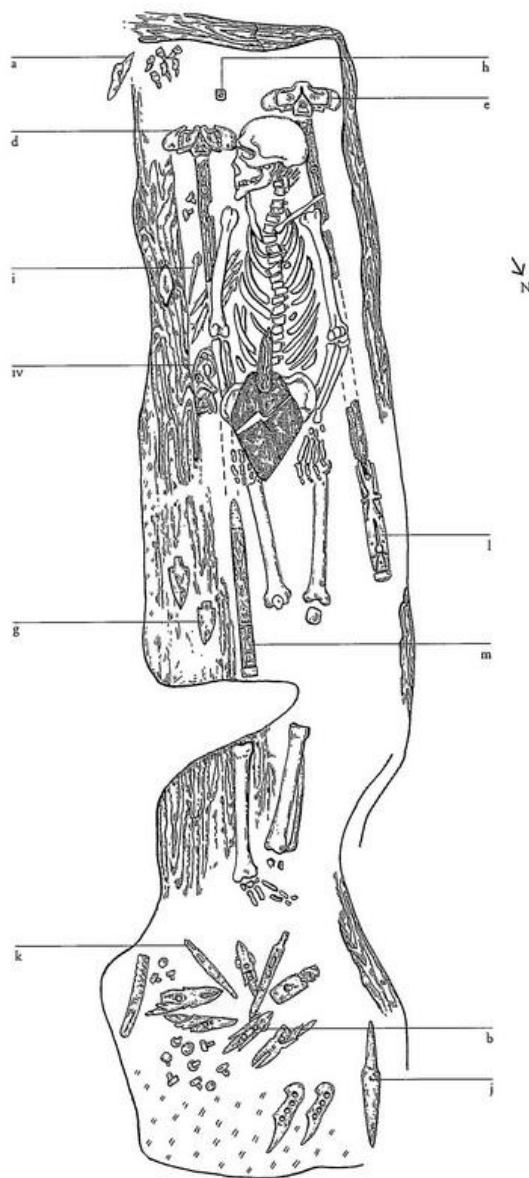
During the years from 1931 to 1935, financially supported by the Territorial Legislature, Geist conducted excavation at the Kukulik site, the largest ancient midden on

St. Lawrence Island. The data of his excavations has been reported in his monograph (Geist & Rainey 1936). The Kukulik midden contains cultural layers from OBS culture to the historical period, and I have recorded data from 249 artifacts in this collection for my research. Some of the OBS artifacts will be described in the following text.

The most conspicuous OBS culture sites in the Asian side of the Bering Strait are the Uelen cemetery and the Ekven cemetery, which are located in the East Cape. The Uelen cemetery on Chukchi coast was excavated by M.G. Levin and D.A. Sergeev between 1957 and 1960 and seventy six burials were discovered. The Ekven cemetery on Bering Sea coast, 40 miles away from the Uelen Cemetery, was excavated by Sergei Arutiunov and Dorian Sergeev in the years from 1961 to 1974 and a total of 210 burials were discovered. Most artifacts have been identified as belonging to OBS culture, while also some burials are represented by artifacts of Okvik, Punuk, or Birnirk cultures (Arutiunov & Sergeev 2006[1969], 2006 [1975]; Bronshtein & Dneprovsky 2009). Since 1987, new excavation at the Ekven cemetery started to be conducted by Mikhail Bronshtein and Kirill Dneprovsky, and 120 more burials have been uncovered (Bronshtein & Dneprovsky 2009).

The structures of graves and grave goods vary in different burials at the Uelen and Ekven cemeteries, implying the social hierarchy during the Okvik and OBS period. Some graves were well constructed with stones, logs, and large whale bones and were deposited with abundant grave goods. Arutiunov and Sergeev suppose that occupants of such rich burials were most likely good hunters, great craftsmen, tribal elders, or shamans (2006[1975]: 119). Ekven Burial 234 (Figure 26, 27) has been identified to be a grave for a great hunter of the OBS culture. Alongside the skeleton and below the occupant's feet, many maritime hunting tools were deposited. These implements, including a wooden harpoon shaft, ivory socket pieces, an ivory foreshaft, an ivory ice pick, an ivory ferrule ornament, an ivory zoomorphic drag handle, several ivory harpoon heads, two ivory counterweights, a lithic harpoon point, and a lithic spear point, almost represent the most typical OBS maritime hunting technology (Bronshtein & Dneprovsky 2009: 100-104). In



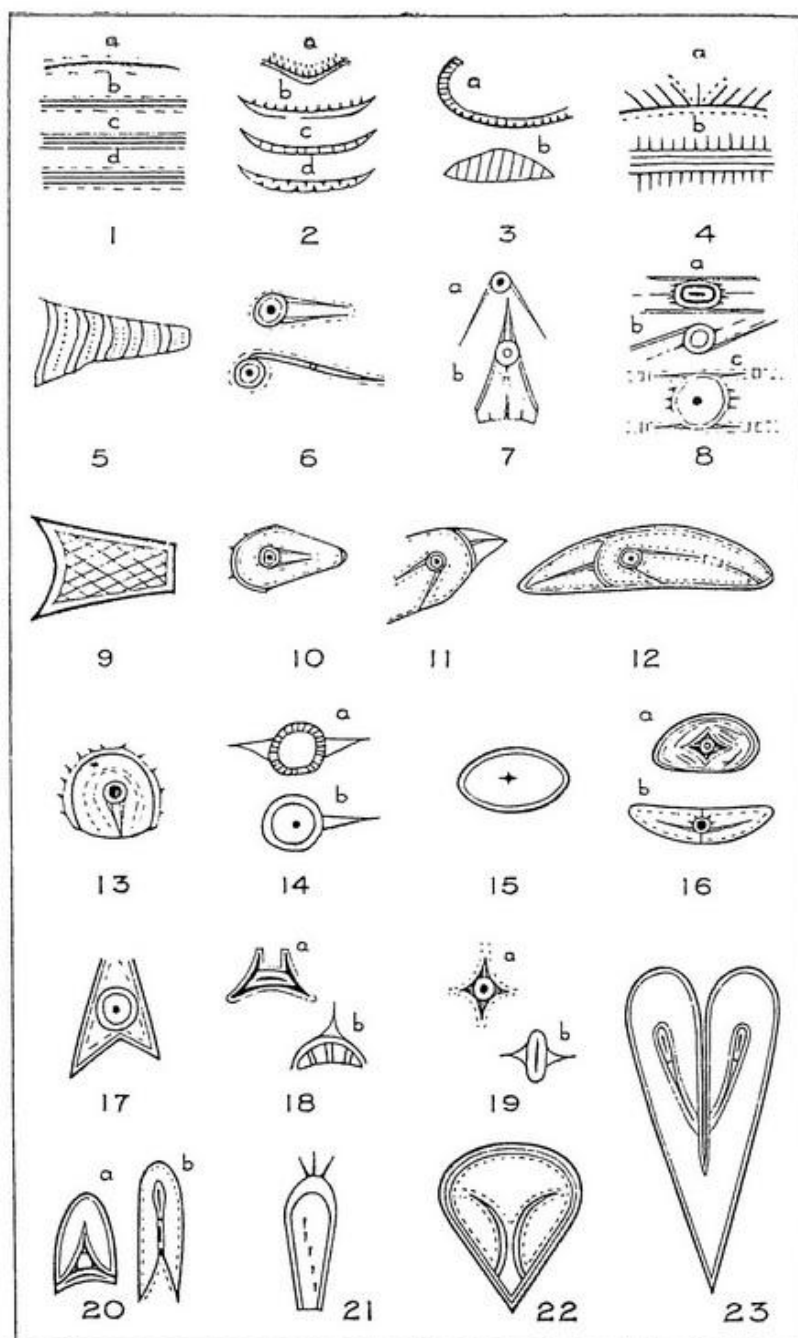


**Figure 26. Plan of Burial 234, Ekven Cemetery.** Letter a-m and IV shows the locations of artifacts, the names of which are indicated in next figure. After Bronshtein & Dneprovsky 2009: 101, Fig. II.

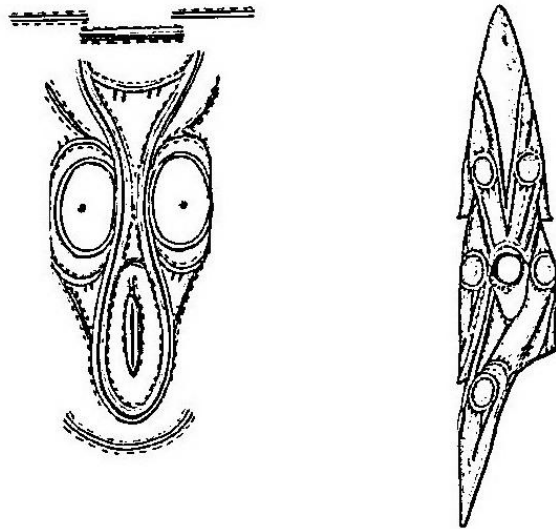


IV

**Figure 27. Artifacts from Burial 234, Ekven Cemetery.** a-c, ivory harpoon head; d, e, ivory counterweight; f, slate harpoon pint; g, slate spear point; h, ivory ferrule ornament; i, arrow head (stone and ivory); j, ivory harpoon ice pick; k, ivory harpoon foreshaft; l, m, ivory harpoon socket-piece; IV, ivory drag handle. After Bronshtein & Dneprovsky 2009: 103-104, Fig. III & IV.



**Figure 28. Principal decorative motives of OBS II.** After Collins 1937: 82, Fig. 15.



**Figure 29.** Samples of decorative motives of OBS III. After Fitzhugh 2009b: 90.



**Figure 30.** Ivory harpoon head from Kukulik site. UAMN collection. 1-1933-8568, OBS II, Type I, 9.3 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 177, Fig. 25.

contrast, some burials in the Eulen and Ekven cemeteries have much simpler construction and poor or no grave goods (Arutiunov & Sergeev 2006[1969], 2006 [1975]).

Collins initiated typological analysis of OBS decorative designs (1937). His proposition of three OBS styles have been widely cited (Arutiunov & Sergeev 2006[1969], 2006 [1975]; Arutiunov & Bronstein 1985; Arutiunov & Fitzhugh 1988; Auger 2005; Dumond 1998, 2006, 2009; Fitzhugh 2009a, 2009b; Fitzhugh & Kaplan 1982; Ray 1961). Although the latest chronological analysis suggests that OBS style II and III were probably contemporary during the period from AD 400 to 800 (Dumond 2009; Fitzhugh 2009b), it still remains unknown whether the decorations of style II and III were affiliated to the same cultural group or the different groups.

A large number of OBS decorated ivory (or bone) objects, including harpoon heads, harpoon foreshafts, socket pieces, counterweights, and other tools and implements, as well as anthropomorphic and zoomorphic carvings were discovered in the above sites. The decorated ivory objects usually bore complicated geometric designs, which were characterized by straight lines, curving lines, dotted and broken lines, spurs, circles, and ovals. The circles and ellipses were often inlaid with plugs of ivory or baleen at their centers. The paired nucleated circles and ovals with dots at their centers thus form eye-like designs (Arutiunov & Sergeev 2006[1969], 2006[1975]; Collins 1937, 1977; Dumond 1998). In Collins's examination, style II combines curving lines with circles, dotted lines, and other geometric forms together in order to produce harmonious patterns (1937: 81) (Figure 28). Style III is a modified and simplified form of style II, and "[t]he overall surface decoration is reduced and primary emphasis is given to graceful flowing lines and concentric circles and ellipses surmounting rounded elevations" (Collins 1977:6) (Figure 29). Integrating Collis' definitions and his own observations, Fitzhugh (2009b) has proposed his detailed description of OBS style II and III. For the style II, he points out that

covergent spurred lines with circle apics are regularized, utilizing most of the same motifs found in Okvik (single and double lines, broken lines, spurred lines, and circles) to create a more elegant and graceful version of the same design. Curving, deeply cut or angled-cut form-lines isolate panels into teardrop shapes bordered inward with multiple parallel fine lines and broken lines facing the panel interiors. Nucleated circles marking eyes and joints are elaborated with multiple (sometimes spurred) rings, central plugs, and strait lines. Spurred line disappear, and panel interiors become more open as extraneous lines are dropped, and nucleated rosettes with spokes and fine spurs appear. Surfaces become more plastic, with varied relief and elevated form-lines and nucleated circles or ovoid. Winged objects become larger and include beastly animal-human forms, and similar expressions are found on sockets and harpoon heads. (pp. 90).

In style III,

Graphic design becomes more curvilinear as form-lines coalesce into bands creating large, open oval-, elliptical-, and teardrop-shaped panels with raised central nucleated circles. Surfaces are also decorated with deeply drilled holes plugged with ivory or baleen. Decorative patterns are integrated over the entire object, which has elegant and graceful proportions. Strait lines are banned, but broken lines continue. Spurred lines disappear, and spurs increase in size, becoming pendant daggers or teeth attached to ovals and circles. Overall, artifacts become more sculptural, with plastic relief accentuated in bosses; and bears, walruses, human, and human-animal combinations are rendered with more detailed anatomical form (Fitzhugh 2009b: 90).

In the report of the Kukulik site, Geist and Rainey (1936) define three types of the OBS harpoons mainly according to the shape, but in some degree, according to the design: Type I, Type J, and Type K. Type I is characterized by open socket, a single spur, and a

blade slit at right angles to the round line hole. Type J has side blades, resembling Okvik culture's Type E. It is distinguished by an open socket, a trifurcated spur, and two line holes. Type K is featured with a closed socket, a single spur, and an end blade slit at right angles to a line hole (1936: 179).

Many harpoon heads from the Kukulik site are decorated with concentric circles or ellipses which encircle a boss-raised elevation to form an eye-like motif. UAMN specimen 1-1933-8568 (Figure 30), Geist's and Rainey's Type I, discovered at the base of the midden, has a blade slit (half of the point is broken away) at a right angle to the axis of the line hole. The eye-like motif with raised bosses is decorated on the two sides of the harpoon head (also see Geist & Rainey 1936: 177). Specimen 1-1931-0584 (Figure 31), Geist's and Rainey's Type I, from the test cut in 1931, was also found at base of the midden, has a more complex decorative design which can be placed in Collins' style 3. In Geist's and Rainey's description, its "entire surface is covered with an elaborate incised pattern. Most of the lines appear in bands which converge to form triangular, diamond-shaped, and elliptical figures, often enclosing a boss outlined by concentric circles which are so placed as to present what appear to be the eyes of some zoomorphic head" (Geist & Rainey 1936:187).

UAMN specimen 1-1933-8569 (Figure 32) is a harpoon head with an open socket, side slots for blade, two line holes at right angles to blade slots, and three barbs, belonging to Geist's and Rainey's Type J. The fragment of a flint blade still remains in place. The abnormal characteristic of this artifact is its particular elongated point. It was found in the lowest deposit at the test cut. The paired concentric circles, resembling monster eyes, are well engraved. The small teeth-like patterns are placed above and below the raised nucleated circles, possibly indicating eyelashes (also see Geist & Rainey 1936: 178). Similar to 1-1933-8569, specimen 1-1931-0609 (Figure 33) also has an elongated point. However, its eye-like concentric circles do not outline raised bosses (also see Geist & Rainey 1936: 188). There are more Type J harpoon heads which were found on the northeast beach slope of the Kukulik midden. They all have side blades, open socket, and a trifurcated spur. The eye-like motif of specimens UA72-004-0002

(Figure 34-1) and 3-1935-0097 (Figure 34-3) is indicated by the Okvik's small centrally dotted circle with long sharp spur, demonstrating the Okvik cultural influence to OBS culture. Specimen 3-1935-0075 is similar to 1-1933-8569, using paired concentric ellipses to form an eye motif. Above and below the circles are eyelash patterns (also see Geist & Rainey 1936: 206).

UAMN specimen 3-1935-0097 (Figure 35), a harpoon head of Geist' and Rainey's Type K, was also found in the northeast beach slope cut. It has an end blade slit, a closed socket, a single spur, and decoration of OBS II. According to Geist and Rainey (1936: 207), this harpoon head is associated with UA 72-004-0002, 3-1935-0097, and 3-1935-0075 in provenience. Its decorative design combines the Type I and Type J, "with overlapping 'zoomorphic heads' along one edge, raised elliptical figures outlined by deep incisions, minute concentric circles with tangential lines, and fine stippled lines paralleling the deep incisions" (207-208).

UAMN specimens 1-1934-1484 (Figure 36) and 1-1934-1481 (Figure 37) were both found at the base of the beach slope in the West Mound. The former is a harpoon of Type K, but the latter's type is unknown because its rear part is missing. For both these harpoon heads, an animal eye motif is engraved along each edge of the artifact. Their elliptical bosses are pronounced to resemble zoomorphic heads with large, open eyes. 1-1934-1481 is also incised with a toothy mouth above the blade slit (also see Geist & Rainey 1936: 218).

There are also some harpoon heads which bear designs without an eye motif. Some designs are still centered on the concentric circles but not in pairs and without raised eminences, while others are decorated only with curved, broken, and spurred lines. UAMN Specimen 1-1935-0120 (Figure 38-1), excavated from the northeast beach slope at the Kukulik site, is decorated with an unusual wheel-like design on one side of the spur. In addition, the whole surface is decorated with a design composed of straight, broken, and curved lines and long sharp spurs with the small concentric circles. This harpoon head is defined as Rare Type 14 by Geist and Rainey (1936: 208). Excepting for its blade slit paralleling to the line hole, the other characteristics are same as Type I such as a



round line hole, end blade slit, an open socket, and a single spur. UAMN specimen UA 207-M-2036 (Figure 38-2), an ivory harpoon head collected by Geist from St. Lawrence, bears elaborate curvilinear design but no nucleated circles or ovals.



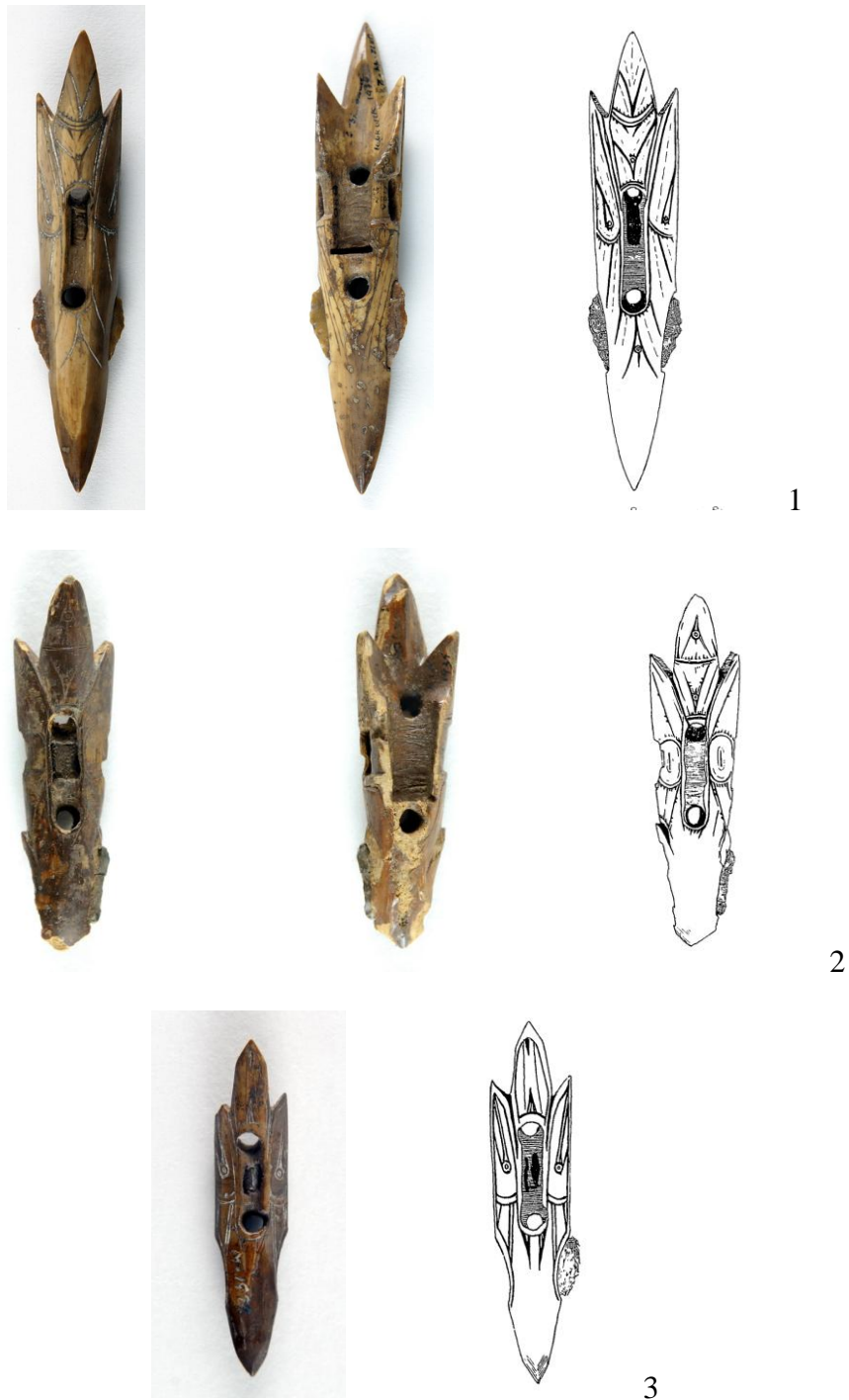
**Figure 31. Ivory harpoon head from Kukulik site.** UAMN collection. 1-1931-0584, OBS III, Type I, 12.7 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 187, Fig. 31.



**Figure 32. Ivory harpoon head from Kukulik site.** UAMN collection. 1-1933-8569, OBS III, Type J, 13 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 178, Fig. 26.



**Figure 33. Ivory harpoon head from Kukulik site.** UAMN collection. 1-1931-0609, OBS II, Type J, 12.5 cm length. Photograph by Feng Qu.



**Figure 34. Type J ivory harpoon heads from Kukulik site.** UAMN collection. 1. UA72-044-0002, OBS II, 11.9 cm length. 2. 3-1935-0075, OBS II, 8.1 cm length. 3. 3-1935-0097, OBS II, 7.2 cm in length. Photograph by Feng Qu. Drawings after Geist & Rainey 1936: 206, Fig. 37, 38, 39.



**Figure 35. Ivory harpoon head from Kukulik site.** UAMN collection. 3-1935-0097, OBS II, Type K, 7.2 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 207, Fig. 40.

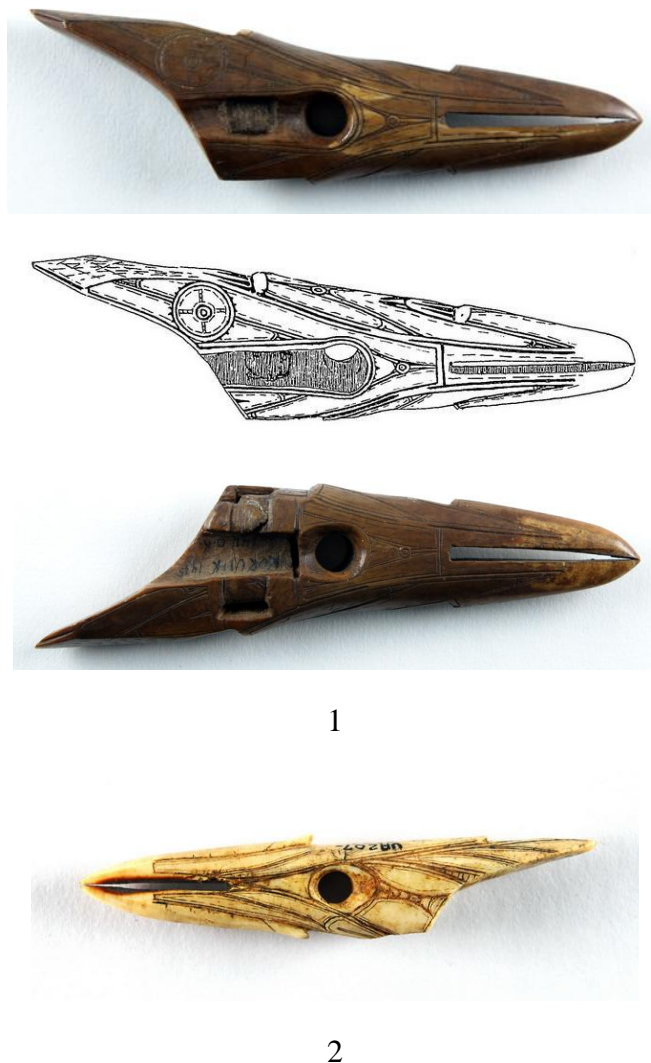




**Figure 36. Ivory harpoon head from Kukulik site.** UAMN collection. 1-1934-1484, OBS II, Type K, 7.5 cm length. Photograph by Feng Qu.



**Figure 37. Ivory harpoon head from Kukulik site.** UAMN collection. 1-1934-1481, OBS II, Type K, 8.5 cm length. Photograph by Feng Qu.



**Figure 38. Ivory harpoon heads from St. Lawrence Island.** UAMN collection. 1. 1-1935-0120, Kukulik site, OBS II, 11.8 cm length. 2. UA207-M-2136, provenance unknown, OBS III, 9.9 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 208, Fig. 41.



**Figure 39. Ivory artifacts from St. Lawrence Island.** UAMN collection. 1. 1-1931-0594, harpoon socket piece, Kukulike site, OBS II, 13.8 cm length. 2. 1-1931-0993, blubber scraper, Okvik site, OBS II, 7.2 cm length. 3. UA64-21-0969, needle case, provenance unknown, OBS II, 7.9 cm length. 4. 1-1934-1845, button, Kukulik site, OBS II, 4.8 cm length. Photograph by Feng Qu.





**Figure 40. Ivory harpoon foreshaft receiver from Kukulik site.** UAMN collection. UA77-041-0015, OBS III, 9.6 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 215, Fig. 44.

The nucleated circles in eye-like form are also represented by other implements in OBS culture such as socket pieces, foreshaft, blubber scraper, knife handle, and needle case. UAMN specimen 1-1931-0594 (Figure 39-1) is an ivory socket piece with decorative design of OBS style II. Unusually, it uses paired half-ovals to represent animal eyes rather than nucleated circles. Below the eye figures, the eyelash is well engraved. Although its upper half is broken away, traces of another pair of eyes at the edge of the broken cross can be detected. Multiple layers of eye motif are a common design decorated on the ivory socket pieces from the Ekven cemetery (Arutiunov & Sergeev 2006 [1975]). UAMN specimen 1-1931-0993 (Figure 39-2) is an ivory blubber scraper decorated with an OBS design of a monster mask. The large nucleated ellipses with raised bosses and eyelash patterns are engraved, the converging lines form a large triangle shape which may possibly resemble snout, and the toothy mouth is also clearly indicated. UAMN specimen UA64-21-0969 (Figure 39-3) is a needle case collected by Geist in St. Lawrence Island, but information about its provenance is missing. The snout represented by curved lines and eyes represented by concentric ellipses are incised on the surface painted with white pigment. UAMN specimen UA77-041-0015 (Figure 40) is an ivory harpoon foreshaft receiver found from the lowest level of the beach slope cut. Two zoomorphic heads can be identified from the two edges of the artifact. Geist and Rainey maintain that the zoomorphic images resemble a fish's head (1936: 215). UAMN specimen 1-1934-1866 (Figure 39-4) is an ivory button with eye motif represented by the paired small nucleated circles. There is also a large single circle engraved between the two "eyes." Each circle has a puncture at the center which seems to be inlaid with plugs of ivory or baleen.

From my own observations, almost all decorated objects are associated with sea mammal hunting or processing, or activities related to materials from sea mammals (such as needle case used for skin sewing). Land hunting tools and other implements which have nothing to do with sea mammals usually do not have decorations. For example, the lowest cultural layer of the beach slope in the West Mound at the Kukulik represents the

earliest phase, and almost all decorated artifacts uncovered here bear typical OBS style designs. I thus assume that the un-decorated artifacts from the same section may also belong to OBS culture. UAMN specimens 1-1934-1495 and 1-1934-1494 (Figure 41-1, 2) are two long ivory barbed spear points without decoration. They were possibly used for a bird spear or a fish spear. An armor plate (1-1934-1539, Figure 41-3) and an adze head were found together. Both are made of bone and have no decoration. An ivory fish sinker, specimen 1-1934-1524 (Figure 41-4) has a smooth surface but no decoration. All these artifacts were found on base clay, demonstrating they represent the earliest artifacts of the Kukulik site, as well as those decorated with OBS designs from the same cultural section.

One of the best-known ivory implements is counterweight. For many years it has been known by the name of “winged object” because of its unknown function. However, this problem has been resolved by Russian archaeologists in 1961 when they found a “winged object” was jointed with the fragment of a wooden shaft in Burial 12 in Ekven cemetery and finally indentified it as the rear part of a harpoon complex, a counterweight to balance the front part during the throwing process (Arutiunov & Sergeev 2006[1969]: 136-137).

Most OBS counterweights are decorated with complex designs which are composed of curved, straight, broken, and converging lines, and nucleated circles or ellipses. The OBS counterweights differ from harpoon heads and socket pieces in expressing representational images. As Bronshtein (2009: 145) has stressed, “Each one is a masterpiece of small plastic art that is unique, expressive, and dynamic in form.” In addition to some counterweights which were only incised with curvilinear designs, others represent mask-like images in the central panel, which reveal sea-mammal heads, polar bear heads, or human forms. Bronshtein in particular emphasizes the importance of the counterweight in studies of the OBS culture. He suggests that the counterweight “is a keystone marker for the entire OBS culture” (144). According to his analysis of the decorative designs, he has distinguished the counterweights of Okvik, OBS, and early Punuk phases into four types:

The first type is dominated by simple abstract forms. Deeply incised lines divide flat surface into segments shaped by triangles and half-ovals. As on harpoon heads, the sculptural aspects and motifs conform to and reinforce the design of the object. The second class has a schematic mask-like image in the central panel and a suggestion of sea-mammal heads on the ends of the wings. The third group reveals mask-like polar bear heads and anthropomorphic forms in a realistic manner, though some figures are fantastical and conventionalized. The fourth group of winged objects is marked by an extreme and stylized repetition of images used in the third group. (Bronshtein 2009: 145)

Bronshtein's Type 1 equates counterweights of Okvik culture (Figure 41). Theriomorphic images are represented by a few numbers of Okvik counterweights. Specimen SMOA (State Museum of Oriental Art, Moscow) 132 (Figure 41-1) has paired nucleated circles to resemble eyes which are placed on the central panel. The beast's nostrils are clearly indicated. As above described, a counterweight from the Okvik site (Figure 10) also bears the design of a pair of large eyes to resemble a powerful theriomorphic being.

In Bronshtein's definition, his type 2 and 3 equates Collins' OBS style 2 and 3, while his Type 4 corresponds to early Punuk phase. As Bronshtein has pointed out, many OBS counterweights have images of animal heads on the ends of the wings while others are carved and engraved with both zoomorphic and anthropomorphic images. A counterweight from the Burial 234 of Ekven cemetery (SMOA 116) has paired concentric circles on each wing to form an animal head (Bronshtein & Dneprovsky 2009) (Figure 27-b, Figure 42-1). A counterweight from Burial 285B of Ekven cemetery (SMOA 188) has a master predator on the central panel, with large eyes, nostrils, and a toothy mouth. The animal's ears are carved in the shape of two bears. Above the beast is a small-sized crouching human figure (Bronshtein 2009: 139) (Figure 43-1, 44). UAMN specimen UA2001-053-0007 (Figure 45-1), an ivory counterweight from the Kukulik site, is an example of Bronstein's Type 2. Its two broad wings are broken off, but the curvilinear decoration and concentric circles can still be seen on the remaining parts. The paired

circles with central dots on the central panel suggest a zoomorphic head. UAMN specimen 1-1931-0578 (Figure 45-2) is another counterweight from the Kukulik site, which has a similar curvilinear design and similar shape to UA2001-053-0007. Its broad wings remain, but the decoration is badly decayed on the two wings. UAMN specimen 1-1931-0962 is a counterweight with a unique shape. The whole body is carved in a triangular form and its wings flare out and up. Both sides are incised with curvilinear design. One surface bears a pair of concentric circles to indicate a zoomorphic face. Both samples 1-1931-0587 and 1-1931-0962 were found at the base of the Kukulik midden (Also see Geist & Rainey 1936: 189).

UAMN specimen UA64-021-1012 (Figure 46-1), a counterweight of Bronshtein's Type 3 collected by Geist from Savoonga (possibly from the Kukulik site), has similar predator design like SMOA 188 from the Ekven cemetery. The master predator is represented by a pair of large nucleated circles which surround a boss and encircle a puncture. Below the eyes is deliberately narrowed to resemble the beast's nostril and the base pit may resemble the beast's mouth. Its other surface is also decorated with curvilinear patterns and concentric circles. UAMN specimen 1-1934-1878 (Figure 46-2), a counterweight excavated from main midden of the Kukulik site, represents the type of late OBS culture. Its wings flare upward and the wing flanges on the ventral surface on the backside is narrowed. The front surface is decorated with curvilinear design and elliptical figures.

Various anthropomorphic or zoomorphic figures were represented by freestanding ivory sculptures, as well as a large number of ivory or bone tools, such as spoon handles, fish hooks, bowl handle, drill supports, toggles, buttons, knife handles, pottery paddles, and drag handles. The harpoon sockets were usually carved into zoomorphic figures, and many of them represented wolf-like (or polar bear) toothed predators. The most often appearing animal images are seals, bears, walruses. Dogs, weasels, ducks, ravens, and fish are also motifs well represented by these objects (Arutiunov & Sergeev 2006[1969], 2006[1975]; Collins 1937). Here, a brief description of the basic distinct features of the OBS sculptures is followed.

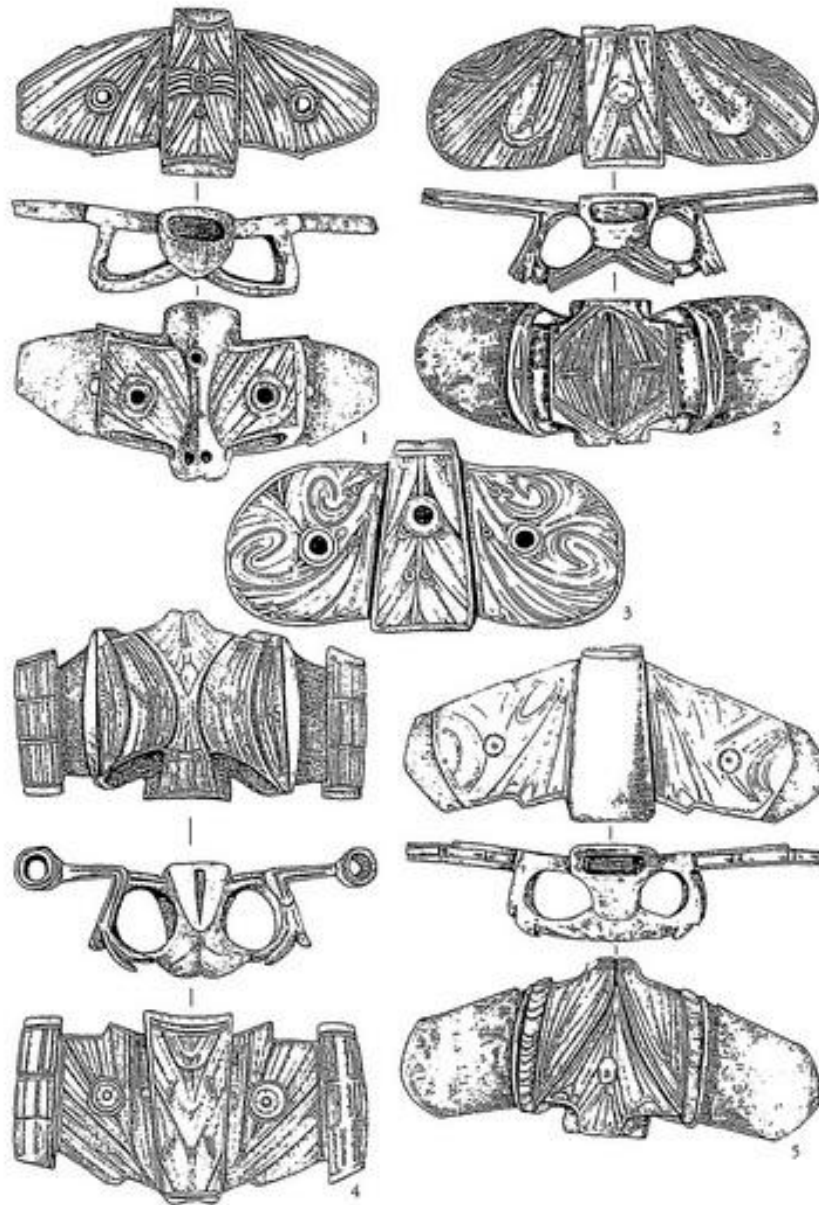
First, many sculptures were incised with typical OBS curvilinear designs (Bronshtein 2009). Two small ivory birds were found from the lowest level of the Kukulik midden (Figure 47). The surface of the bird body is decorated with an incised pattern of typical OBS design. The pattern is made of curvilinear figures combining small circles with central punctures. Geist and Rainey have identified them to be buttons or fasteners (1936: 214, 221-222). A carving of a polar bear was found at the Hillside site. It has an exaggerated long neck and short legs which do not support the body. The whole is decorated with curvilinear design and several small elliptical figures (Also see Collins 1937: 49) (figure 48).

Second, one object often represents poly-icons, combining different animal or human images in an individual artifact. A zoomorphic object from the Ekven cemetery (SMOA 111, Figure 49-1), possibly a knife handle, depicted a bear in the mouth of the other bird-like or sea mammal-like creature (Arutiunov 2009: 127). The combination of human and animal may reflect a human transformation motif. An ivory toggle from the Ekven cemetery (SMOA 779, Figure 49-3) depicts two female faces and two walruses (Arutiunov 2009: 128). A spoon handle from the Ekven cemetery (SMOA 393, 394, Figure 49-2) represents human faces at the top end and represents a bird head at the other end which connects the spoon (130). A pottery paddle, also from Ekven cemetery, has geometric designs for stamping pottery on the front side, while the back side was engraved with a human figure and a second human face. The whole body of the object was shaped in a bear form and the end of the handle reveals a bear head (Arutiunov & Sergeev 2006 [1975]: 145; Crowell 2009: 214-215) (Figure 50).

Third, most anthropomorphic and zoomorphic carvings are used as implements such as spoon handles, ulu handles, knife handles, pottery paddles, hooks, pendants, ornaments, and so on. A walrus-woman ivory object from the Ekven cemetery (figure 51-1), depicting a pregnant woman with a walrus face on her lower body, may be used as a hook or a toggle for hunters to drag their hunted sea animals on beach (Crowell 2009: 221). SMOA specimens 94 and 92 (Figure 51-2, 3) both are from Burial 216, Ekven cemetery. The former is a moon-faced mask, found at the neck area of the deceased

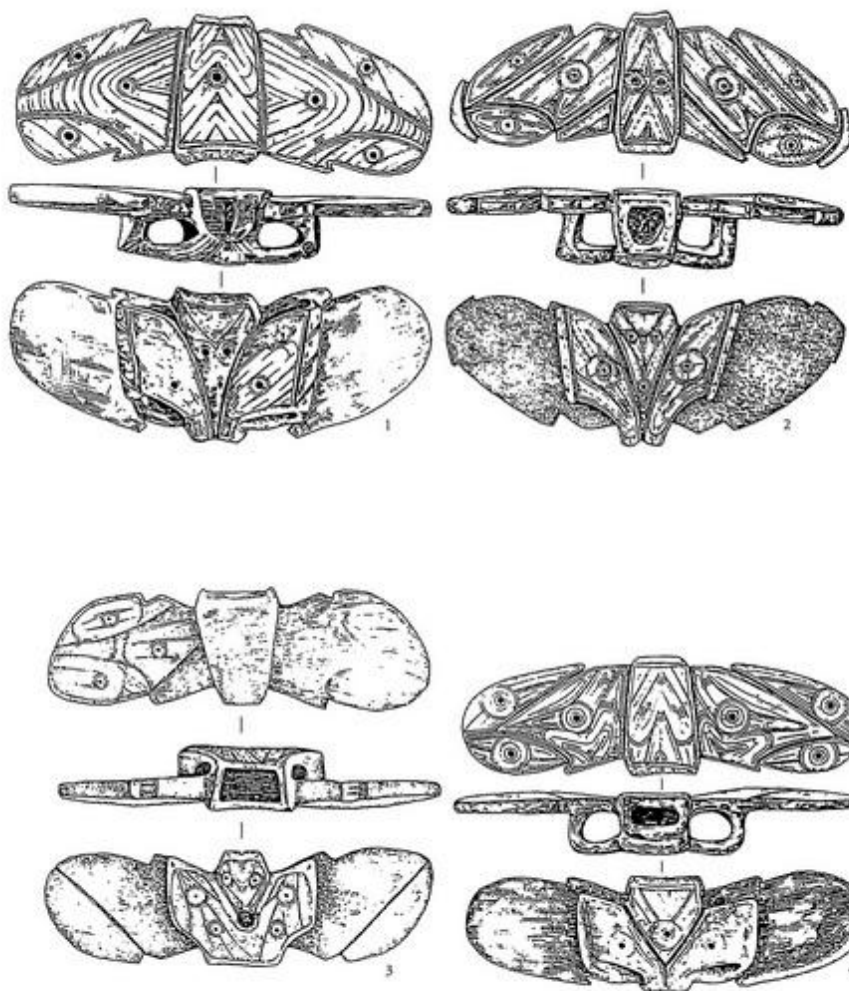
young woman. It is possibly a pendant or clothing ornament. The former was found near the chest of the woman, possibly used as a hook or pendant. It has two mask-like faces on both sides (Bronshtein 2009: 160). A well-preserved, small-sized ulu was excavated from Burial 313, Ekven cemetery (Figure 51-4). It was probably used as woman's sewing implement. Its ivory handle was carved as a seal and there is a ball in the mouth, implying a mythological significance (Arutiunov 2009: 127). UAMN specimen 1931-NN-36 (Figure 52-1) is an ivory human face mask, found from the Kukulik site. It has a long nose and squinted eyes, but has no mouth indicated. There is a groove to surround the edge, manifesting that it might be used in connecting with other implements. The facial feature of this artifact is similar to a face attached to a counterweight which bears OBS designs. The latter, housed in Anchorage Museum of History and Art (AMHA, Catalog No. 71.61.1), is a purchased artifact, and was said to be from the Kukulik site. Squinted eyes, nose, and mouth are indicated on the AMHA face (Wardwell 1986: 74-75). The similarities between these two human faces suggest that the specimen 1931-NN-36 was most likely to be made by an OBS artist. Actually, many OBS human faces are characterized by the squinted eyes (Figure 51-3, 52).

Fourth, the round sculptures of human heads are usually broken away from the torsos, like those found in Okvik culture. UAMN specimen 1-1931-0961 (Figure 52-2) is a doll head found at the base of the Kukulik midden. The eyes are slit-like by indicating slanting lines, and mouth and nostrils are indicated, but a nasal bridge is lacked. Tattoo marks are shown on the face. 1-1934-1542 (Figure 53) is a female torso with a missing head, excavated at the base of the Beach Slope from west mound at Kukulik. The body is decorated with typical OBS curvilinear design and the female breasts are realistically indicated (also see Geist & Rainey 1936: 223).

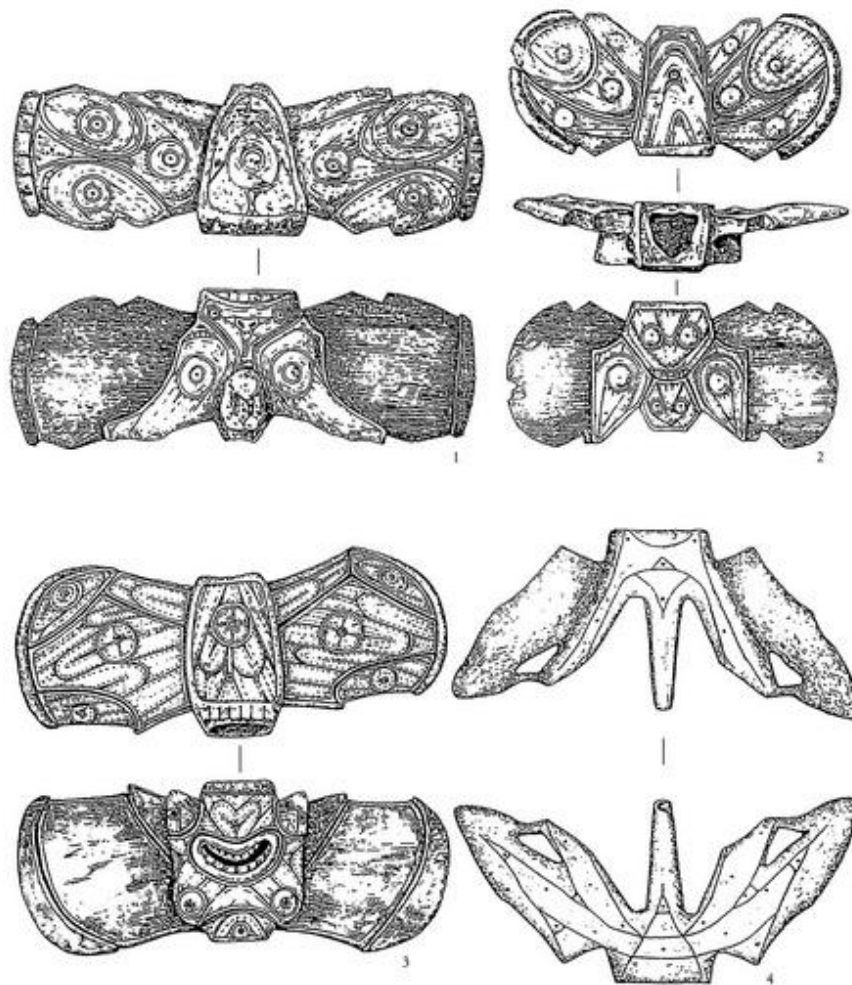


**Figure 41. Bronshtein's Type 1 counterweights, Okvik (OBS I) culture.** All specimens are from Ekven cemetery. Collection of State Museum of Oriental Art, Moscow (SMOA). 1. SMOA 132, Burial 255. 2. SMOA 122, Burial 238. 3. SMOA 129, Burial 251. 4. SMOA 183, Burial 284. 5. SMOA 123, Burial 250. After Bronshtein 2009: 144, Fig. 7.





**Figure 42. Bronshtein's Type 2 counterweights, OBS II.** All specimens are from Ekven cemetery, SMOA collection. 1. SMOA 116, Burial 234. 2. SMOA 764, Burial 310. 3. SMOA 51946, Burial 320. 4. SMOA 115, Burial 234. After Bronshtein 2009: 146, Fig.8.



**Figure 43. Bronshtein's Type 3 and 4 counterweights, OBS III and Punuk .** All specimens are from Ekven cemetery, SMOA collection. 1. SMOA 188, Burial 285B, OBS 3. 2. SMOA 415, Burial 304, OBS 3. 3. SMOA 396, Burial 302, OBS 3. 4. SMOA 792, Burial 319, Punuk. After Bronshtein 2009: 147, Fig. 9.



**Figure 44. Ivory harpoon counterweight.** SMOA 188, Burial 285B, Ekven cemetery, OBS III, 20.0 cm in length. After Bronshtein 2009: 139, Fig. 1, 2.



**Figure 45. Ivory harpoon counterweights from Kukulik site.** UAMN collection. 1. UA20001-053-0007, OBS 2, 7.1 cm width. 2. 1-1931-0962, OBS 2, 9.8 cm width. 3. 1-1931-0578, OBS 2, 18.8 cm width. Photograph by Feng Qu.



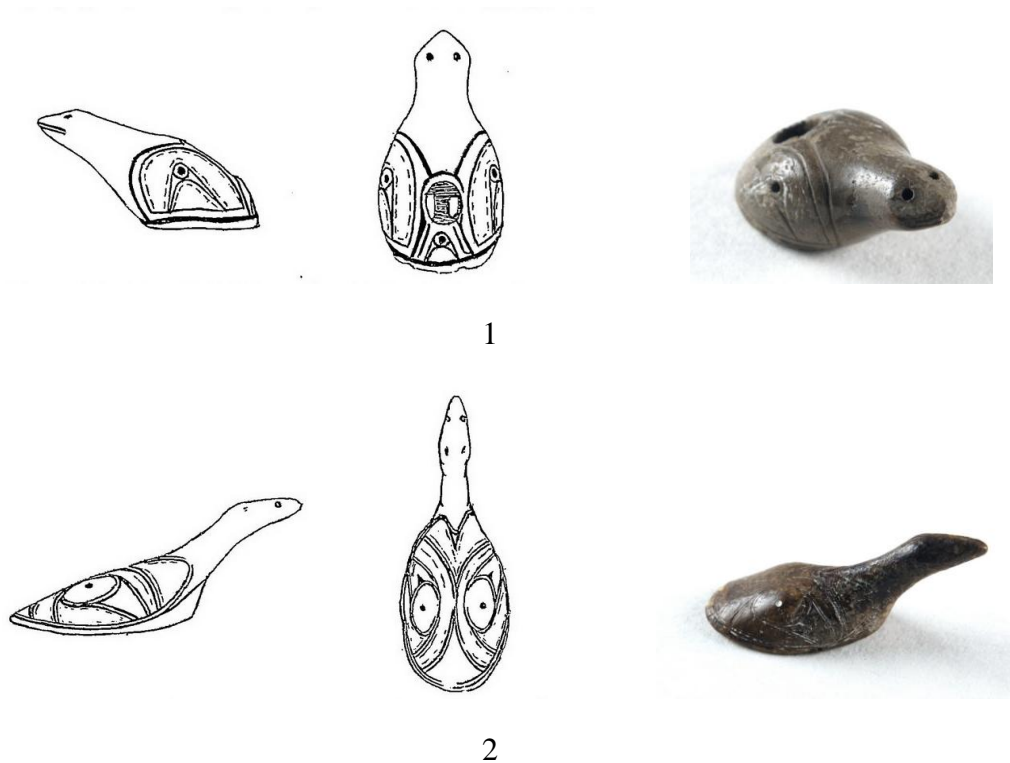
1



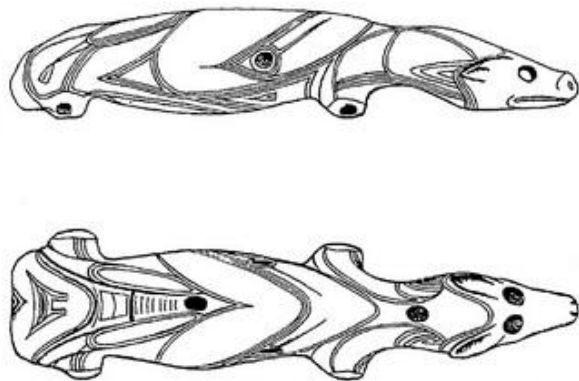
2

**Figure 46. Ivory harpoon counterweights from Kukulik site.** UAMN collection. 1. UA64-021-1012, OBS III, 12.0 cm in width, photograph by Brian Allen. 2. 1-1934-1878, OBS III, 15.6 cm in width, photograph by Feng Qu.





**Figure 47. Ivory birds from Kukulik site.** UAMN collection. 1. From the beach slope cut, 3.5 cm length. 2. From the base of the beach slope in the west mound, 4.7 cm length. Photograph by Feng Qu. Drawing after Geist & Rainey 1936: 214, Fig. 43; 221, Fig 45.



**Figure 48. Ivory polar bear from Hillside site at Gambell.** 9.0 cm length. After Collins 1937: 49, Fig. 7.



**Figure 49. Anthropomorphic and zoomorphic ivory objects from Ekven cemetery.** 1. Zoomorphic object, SMOA 111, from Bruial 222, 15.9 cm length. 2. Anthropomorphic spoon handle, SMOA 393 & 394, from Burial 302, 18.8 cm length (ivory and bone). 3. Walrus-women transformation toggle, SMOA 779, from Burial 309, 5.0 cm length. 4. Spoon handle with raven image, SMOA 105, from Burial 233, 9.7 cm length. After Arutiunov 2009: 127-130, Fig. 1, 2, 4, & 7.



**Figure 50. Ivory pottery paddle.** Collection of the Peter the Great Museum of Anthropology and Ethnography, Russian Academy of Sciences, St. Petersburg, Catalog No. 6508-547, from Burial 45, Ekven cemetery, 32.8 cm length. After Crowell 2009: 214, Fig. 10.





**Figure 51. Anthropomorphic and zoomorphic ivory carvings.** 1. Walrus-woman hook, collection of the Peter the Great Museum of Anthropology and Ethnography, Russian Academy of Sciences, St. Petersburg, Catalog No. 6588-17, from Burial 154, Ekvenk cemetery, 10.4 cm length, after Crowell 2009: 221, Fig. 21. 2. Human face mask, SMOA 94, from Burial 216, Ekven cemetery, 4.5 cm height, after Bronshtein 2009: 160, Fig 28. 3. Two-faced hook or pendant, SMOA 92, from Burial 216, Ekven cemetery, 3.8 cm height after Bronshtein 2009: 160, Fig 29. 4. Ulu and handle, SMOA 784, from Burial 313, Ekven cemetery, 11.5 length after Arutiunov 2009: 127, Fig. 3.



1



2

**Figure 52. Ivory human heads from Kukulik site.** UAMN collection. 1. 1931-NN-36, 9.6 cm length, photograph by Feng Qu. 2. 1-1931-0961, 6.5 cm length, photograph by Brian Allen, drawing after Geist & Rainey 1936: 188, Fig. 32.



**Figure 53. Ivory human figure from Kukulik site. UAMN collection. 1-1934-1542, OBS 2, 11.4 cm length. Photograph by Feng Qu.**

### **Punuk Culture**

The Punuk culture was developed from OBS culture and lasted from AD 800 to 1200. It was centered on St. Lawrence and the Diomed Islands and extended to both sides of the Bering Strait including a large part of the eastern and southeastern coast of Chukotka and the Bering Sea coast in Alaska. However, a single Punuk site was found at Point Barrow (Arutiunov & Fitzhugh 1988; Collins 1937, 1973; Dikov 2004[1979]; Fitzhugh 2009b). The important Punuk sites on St. Lawrence Islands include the Miyowagh midden, the Ievoghiyoq site, Seklowwaghyaget site (Collins 1937), the Mayughaaq cemetery (Mason 1998), and Kukulik mound (Geist & Rainey 1936).

In 1928, Collins excavated an old site on Punuk Island for 2 months and discovered more than a hundred artifacts which bear a different style of decoration from the OBS style. Collins immediately called this new found decoration “Punuk style.” After the excavation on Punuk Island, in the same year, Collins conducted a survey on a large kitchen midden at Cape Kialegak, on the southeastern end of St. Lawrence, and collected several thousands of artifacts. He further recognized that Punuk style, or “Punuk culture” represented a prehistoric phase between the OBS and the modern. In 1929, Collins excavated for one month at Cape Kialegak and obtained another large collection of artifacts of both Punuk and OBS cultures (Collins 1937: 26-31). In 1930 and 1931, Collins and his crew excavated on the Hillside site, Miyowagh site, Ievoghiyoq site, Seklowaphyaget site, and old section of Gambell at Gambell and obtained a huge collection including artifacts of Okvik, OBS, Punuk and historical phases, which are now housed in National Museum of Natural History (Collins 1937). Another large collection of Punuk artifacts are from Geist’s excavation at the Kukulik site in the years from 1931 to 1935, and now housed in UAMN. The investigation in this section is mainly based on my observation of the Kukulik collection and archaeological reports of the Gambell sites (Collins 1937) and the Kukulik site (Geist & Rainey 1936).

The economics of Punuk culture more relied on whale hunting. Compared with Okvik and OBS cultures, the number of Punuk sites is much bigger and the size of

settlement is much larger, reflecting population growth. Punuk culture is also characterized by increased use of whale bones for construction of houses and graves, more complex social organization, intertribal cooperation, trade, warfare, and large-scale ceremonialism (Arutiunov & Fitzhugh 1988; Fitzhugh 2009b). According to the archaeological record of Gambell sites, Punuk house has similar features to the OBS house such as semi-subterranean form, square plan, stone floor, and entrance passages. However, the Punuk house was much larger than the OBS house (Collins 1937: 260-261). Large communal houses (men's houses) appeared during the Punuk period. In 1960s and 1970s, Swiss archaeologist Hans-George Bandi conducted a "St. Lawrence Island Archaeological Field Project" and excavated several cemeteries and dwelling sites. A Punuk communal house was found between the Shore of Troutman Lake and Miyowagh site, with a size of 4 by 10 meter (Figure 54). Whale skulls and drift wood were used for the construction. This communal house implies a ritual and social significance related to whaling activities. About 150 graves were found in Bandi's project and the majority of them are attributable to Punuk culture. Whale bones such as skulls and jaws were commonly used for the structures (Bondi & Blumer 2002).

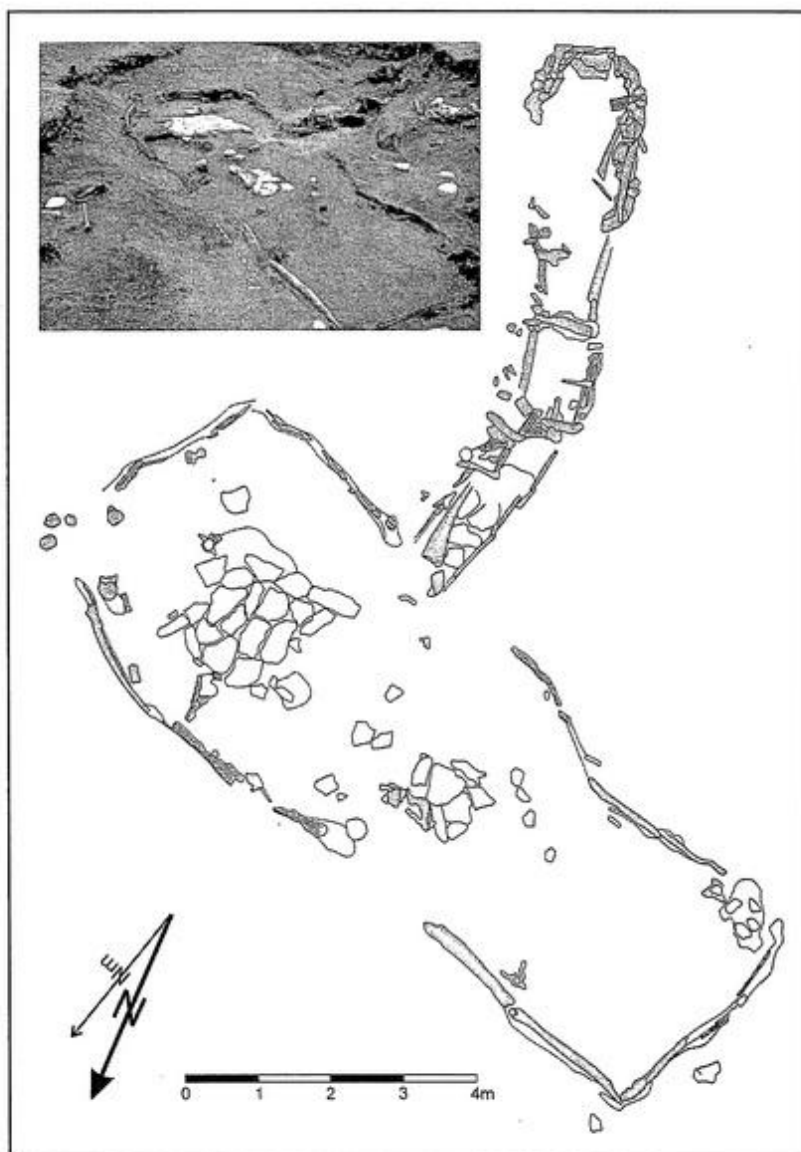
Punuk culture inherited OBS artistic tradition and continued to use incised lines and circles to decorate harpoon heads, counterweights, and other objects. Straight and slightly curving lines dominated the Punuk design. The multiple lines gradually transited to single lines with secondary line branches. The lines of early stage were incised rather lightly but those of the late stage were deeply and evenly incised. This suggests that Punuk artists started to use metal tools instead of lithic tools. The late Punuk design is characterized by nucleated spurred circles with compass, paired long and deep lines, Y form motif, V form motif, ladder-like form, tooth-like pattern between parallel lines, and derivative zigzag (Collins 1937, 1977: 7-9; Fitzhugh 2009b; Wardwell 1986). Allen Wardwell (1986) has contributed a detailed description of Punuk incised design:

Lines are uniformly and deeply cut. Circles are of exact and uniform shapes and sizes, and the center dots are precisely placed. Ovals are rare in Punuk art, but right

angles appear in square and rectangular shapes, crossed lines, and lines with vertical spurs. Both straight and curved lines often end in drilled pits, and the lightly engraved broken and dotted lines of the Old Bering Sea tradition are no longer found. When spurs are added on to circles, they are evenly placed, and usually number only two. The Y-figure - an important component in the later art styles of the historical period - first appears in Punuk art. (p. 96)

According to the shape and design, Geist and Rainey (1936) have identified three types of Punuk harpoon heads which were found in the Kukulik site: Type D, Type E, and Type F. Type D has a blade slit parallel to the line hole, an open socket, and a single spur. Type E has “a closed socket, a single spur, a blade slit at right angles to the axis of the line hole and a high, sharp median ridge on both sides running from the line hole to the point” (1936: 174). Type F is characterized by “an open socket with lashing slots, single spur, a blade slit at right angles to the axis of the line hole, and a high, sharp ridge on both sides running from the point toward the line hole” (175).

Punuk culture shared many common decorative motifs with modern Eskimos. Based his observations of artifacts from the St. Lawrence Island, Collins has revealed that “[t]he remaining basic design elements employed by the modern Eskimos are all to be found in Punuk art” (1937: 287). The most common design elements during the Punuk and historical period included “the simple Y figure, detached dots, bands of straight lines, and short cross or connecting lines” (287). These decorative motifs can be all seen on Punuk harpoons. All Type D harpoon heads from the northeast beach slope of the Kukulik site are decorated with “converging lines, Y figures, and short spur-like lines which join the longitudinal lines” (Geist & Rainey 1936: 202). UAMN specimen 3-1935-0100 (Figure 55), also documented by Geist and Rainey as Figure 33 (202), bears straight lines forming V and Y figures. UAMN specimen 1-1935-0111 (Figure 56) is also a harpoon head of Type D found from the northeast beach slope. Its decorative design is composed of closely spaced lines forming bands.



**Figure 54. House G I near the Miyowagh site at Gambell.** After Bandi & Blumer 2002: 49, Fig. 9.





**Figure 55. Ivory harpoon head, Type D (Punuk) from Kukulik site. UAMN collection. 3-1935-0100, 10.8 cm length. Photograph by Feng Qu, drawing after Geist & Rainey 1936: 202, Fig. 33.**





**Figure 56. Ivory harpoon head, Type D (Punuk) from Kukulik site. UAMN collection. 1-1935-0111, 9.9 cm length. Photograph by Feng Qu.**



**Figure 57. Ivory harpoon heads, Type E (Punuk) from Kukulik site. UAMN collection. 1. 1-1934-1763, 8.9 cm length. 2. 1-1935-0068, 7.5 cm. Photograph by Feng Qu.**



**Figure 58. Ivory harpoon head, Type F (Punuk) from Kukulik site.** UAMN collection. 0199-1986, 9.7 cm length. Photograph by Feng Qu, drawing after Geist & Rainey 1936: 203, Fig. 35.

Although Type E harpoon heads also bear long converging lines, Y or V figures, and spurred lines like Type D specimens, they usually have small detached punctures associated with line designs (202). In my observation, these harpoon heads often have a diamond-shaped figure to surround the round line hole (Figure 57).

Punuk harpoon heads of Type F have similar incised design like Type D and E, which is composed of converging lines, Y figures, and spurred lines. The difference between D and F is that Type F has a blade slit at right angles to a line hole. UAMN

specimen 0199-1986 (Figure 58) is a harpoon head excavated from the northeast beach slope of the Kukulik midden, also documented by Geist and Rainey as Fig. 35 (1936: 203). Its incised design is more close to Type E, combining converging lines and Y figures with detached small punctures.



**Figure 59. Ivory harpoon heads of Punuk culture.** UAMN collection. 1. UA64-21-0971, 9.6 cm length, provenance unknown. 2. 4-1934-1057, from the Punuk site on Punuk Island, 11.2 cm length. 3. 4-1934-1060, from the Punuk site, 7 cm length. Photograph by Feng Qu.

One of the most pronounced characteristics of Punuk design was popularity of compass-inscribed circles with nucleated centers which completely replaced concentric circles and ovals of OBS culture. The paired small nucleated circles made with compass, which were used to resemble zoomorphic eyes, replaced the paired, large nucleated

circles or ellipses in OBS culture (Collins 1973). The paired eyes motif was usually decorated on the slit part. UAMN specimens UA64-21-0971 (Figure 59-1), 4-1934-1057 (Figure 59-2), and 4-1934-1060 (Figure 59-3) all have paired eyes designs to symbolize a zoomorphic head. The eye motif can be also seen on other ivory implements. UAMN specimen 1-1927-2646 (Figure 60) is a knife handle from the Kukulik site, decorated with a pair of nucleated circles on one end on both sides. Like specimen UA64-21-0971, multiple round nucleated circles are incised on the whole body and all the circles are connected by straight or slightly curved lines. The compass-incised nucleated circle is also a common decorative motif for harpoon socket piece, harpoon foreshaft, and other implements. UAMN specimens 1-1934-1696 (Figure 61-1) and 1-1933-8573 (Figure 61-2) are both harpoon foreshafts found in the Kukulik site, and both are decorated with compass-made circles and dots. The circles are lined by straight lines. UAMN specimen 3-1935-0114 (Figure 61-3) is an unidentified ivory object excavated from the south slope of the Kukulik site by Geist. It bears much smaller nucleated circles which combine converging lines forming a series of elongated, spur-like Y figures (Also see Geist & Rainey 1936: 191).

Many implements were more favored with varieties of patterns composed of straight lines rather than nucleated circles and small punctures. These artifacts included comb, wrist guard and various handles. The following four samples are all from the collection of the Kukulik site in UAMN. 1-1932-8193 (Figure 62-1) is a finely polished wrist guard, decorated with ladder-like design at the whole edge. Punuk wrist guards were newly appeared objects in the Bering Strait region, introduced from Siberia (Mason 2009a: 121). A comb (1-1934-1880, Figure 62-2) has a similar incised design which consists of transverse lines with short cross lines. 1-1935-0036 (Figure 62-3), a handle excavated from the northeast beach slope of the Kukulik midden, bears a design composed of converging, straight lines on two surfaces, forming V figures in two compartmentalized spaces. 1-1935-0041 (Figure 62-4), an unidentified object, also from the northeast beach slope at the Kukulik site, is decorated with numerous paralleled V figures, which are connected by a long straight line.



**Figure 60. Ivory Knife handle from Kukulik site.** UAMN collection. 1-1927-2646, 13.0 cm length. Photograph by Feng Qu.



1



2



3

**Figure 61. Ivory objects from Kukulik site.** UAMN collection. 1. 1-1934-1696, foreshaft, 7.4 cm length. 2. 1-1933-8573, foreshaft, 12.7 cm length. 3. 3-1935-0114, unidentified object, 22.1 cm length. Photograph by Feng Qu.





**Figure 62. Ivory objects of Punuk culture from Kukulik site.** UAMN collection. 1. 1-1932-8193, wrist guard, from Kukulik site, 9.2 cm length. 2. 1-1934-1880, comb, 7.8 cm length. 3. 1-1935-0036, handle, 13.8 cm length. 4. 1-1935-0041, unidentified, 14.8 cm length.

Curvilinear design was still used but simplified. UAMN specimen 3-1935-0113 (Figure 63-1) is a large ivory whaling harpoon, 19.0 cm long, excavated from the south

slope of the Kukulik midden. It has a closed socket, a single spur, and a blade slit at right angles to the line hole. The decorative design is crudely simple incised pattern consisting of converging lines, small punctures, and a long curved line surrounding the line hole. UAMN specimen 1-1927-0254 (Figure 63-2) is a broken snow goggle collected by Geist from St. Lawrence Island with unknown provenance. The curved lines and small punctures form a simple incised pattern.



1



2.

**Figure 63. Ivory objects of Punuk culture.** UAMN collection. 1. 3-1935-113, whaling harpoon head, from Kukulik site, 19.0 cm length. 2. 1-1927-0254, snow goggle, from St. Lawrence Island, provenance unknown, 7.0 cm length. Photograph by Feng Qu.



The shape of Punuk counterweights experienced a dramatic change. During Punuk period, the counterweights' wings became narrower in contrast with those of OBS culture, and animal faces and beast images were seldom decorated and sculpted. Only the trident-like type counterweight still remained abstract toothy mouth motif suggesting the continued spiritual power (Figure 64-3, 64-4). The surface was deeply incised with simple single or double lines. The line patterns are more abstract rather than representational (Collins 1937; Fitzhugh 2009b). From my observation of harpoon counterweights from Kukulik and other sites in Geist's collection, according to their shapes, Punuk counterweights can be defined into six types. Type 1 is transitional early Punuk counterweight whose wings are much reduced though still retained, equal to Fitzhugh's Type G counterweight (2009b). It also shows a trend toward the later trident-like form. UAMN specimen 1-1927-0390 (Figure 64-1), from Geist's St. Lawrence collection, provenance unknown, is simply incised converging lines on two sides. Type 2 is equal to Fitzhugh's type H. The wings have been much reduced and only remain very narrow basal notches. UAMN specimen 1-1939-0883 (Figure 64-2) shows this type. It seems to be an unfinished product and was abandoned because of being broken. Type 3 is the typical Punuk trident-form counterweight, equal to Fitzhugh's Type J. At the base part it is usually incised with tooth-like design. Fitzhugh suggests that this seems "to carry on the OBS tradition of a beastly mouth" (2009b: 185). UAMN specimens 3-1935-0112 (Figure 64-3) and 1-1927-0247 (Figure 64-4), both excavated from the south slope of the Kukulik mound by Geist, have clear toothy mouth motif at the base of the implement. Type 4 is the counterweight in shape of whale tail. This is a rare form and is not included in Fitzhugh's categories (Figure 64-5). Type 5 is the bottle-shaped counterweight, close to Fitzhugh's Type I. Specimen UA77-41-0014 (Figure 64-6) is also from the south slope of the Kukulik site and both sides of this object are incised with bands of parallel and converging lines and short spurs (also see Geist & Rainey 1936: 190). Type 6 is T-shaped counterweight, not included in Fitzhugh's categories. The sample UA2001-62-113 (Figure 64-7) is collected by Geist from the Seklowaghyaget site

at Gambell. It bears a common Punuk design composed of small punctures and compass-made nucleated circles with converging lines and short spurs.



1



2



3



4



5



6



7

**Figure 64. Ivory harpoon counterweights of Punuk culture from St. Lawrence Island.** UAMN collection. 1. 1-1927-0390, Type 1, provenance unknown, 12 cm width. 2. 1-1939-0883, Type 2, from Kukulik site, 8.3 cm height. 3. 3-1935-0112, from Kukulik site, Type 3, 7.6 cm length. 4. 1-1927-0247, Type 3, provenance unknown, 6.2 cm length. 5. 0198-1896, Type 4, from Kukulik site, 7.2 cm length. 6. UA77-41-0014, Type 5, from Kukulik site, 7.5 cm length. 7. UA2001-62-113, Type 6, from Seklowaghyaget site, 7.1 cm length. 1-5 & 7, photograph by Feng Qu; 6, photograph by Brian Allen.

Anthropomorphic and zoomorphic images were represented by the Punuk carvers. Most of them were incised with Punuk decorative designs. As same as Okvik and OBS cultures, many human dolls were broken off. Heads were usually a broken piece from a torso and torsos were without a head. Punuk human figurines included both genders and the female and male genitalia were often well carved. NMNH specimen A344107-0 (Figure 65-1) and Princeton University Art Museum specimen 1997-126 (Figure 65-2) are both naked human torsos with clear indications of sexy features. The former, which were excavated by Collins in 1929 at the Punuk site on Punuk Islands, is well carved with pendulous breasts and female genitalia. The bulging belly illustrates a pregnant woman (Wardwell 1986: 98). The latter not only has a male genitalia and also emerging breasts. Krutak suggests this figurine represents a transgender male shaman (2009: 193). UAMN specimen 1-1931-0307 (Figure 65-3) is a female torso found at the Miyowagh site by Geist in 1931. Four straight lines below shoulders on each side may indicate tattoo markings.

Animal carvings included both independent figures and implements in an animal shape. UAMN specimen 1-1934-1904 (Figure 66-2) is a small bird carving with incised line design, excavated from the base of the Kukulik midden. Similar ivory pieces during historical period were used for a children's game of "dice" (See Jolles & Dyachkova 2009). However, this piece has a round hole at the end, suggesting that it might serve a different function. Another bird figure (1-1934-1886, Figure 66-1), also excavated from the base of the Kukulik midden, is much larger than 1-1934-1904. Its big size indicates that it is not likely made for the children's game of "dice." The heads of both bird objects were broken away.

In Punuk cultures, seal figures were among the most frequent animal motifs. UAMN specimen 1-1933-8619 (Figure 67-1) is a harpoon rest used with an umiak, excavated from the Kukulik site. 1-1935-0023 (Figure 67-2), a needle case, also found at the Kukulik site, originally had twin seal heads but one head is missing. 1-1939-2970 (Figure 67-3) is a seal sculpture from St. Lawrence Island, provenance unknown. 1-1939-

0403 (Figure 67-4) was found from the Ievoghiyog site, possibly a cord attacher. All four artifacts bear a design composed of long straight or curved lines and short spur-like or cross lines.



**Figure 65. Ivory figurines of Punuk Culture.** 1. NMNH A344107-0, from Punuk site on Punuk Islands, 12.0 cm height, after Krutak 2009:201, Fig. 20. 2. Princeton University Art Museum 1997-126, from St. Lawrence Island, provenance unknown, 18.4 cm height, after Krutak 2009: 193, Fig. 8. 3. UAMN 1-1931-0307, from Miyowagh site, 12.5 cm height, photograph by Feng Qu.



1



2

**Figure 66. Ivory bird figures of Punuk culture from Kukulik site. UAMN collection.**  
1. 1-1934-1886, 7.3 cm height. 2. 1-1934-1904, 3.8 cm length. Photograph by Feng Qu.



**Figure 67. Ivory seal figures of Punuk culture.** UAMN collection. 1. 1-1933-8619, harpoon rest, from Kukulik site, 5.9 cm length. 2. 1-1935-0023, needle case, from Kukulik site, 5.5 cm length. 3. 1-1939-2970, from St. Lawrence Island, provenance unknown, 6.7 cm length. 4. 1-1939-0403, from Ievoghiyoq site, 5.6 cm length. Photograph by Feng Qu.

It is worth noting that Punuk culture has many ivory objects which were carved in the shape of a whale-tail. This phenomenon reflects that whale became the more important element, not only in Punuk people's economic life, but also had a social and spiritual significance in Punuk societies. UAMN specimen 1-1933-8576 (Figure 68-1) is



an ivory handle excavated from Kukulik site. Its one side is flat and without decoration, but another side is rounded and with a design of converging lines and nucleated circles. The end of whale tail was broken away. UAMN specimen 1053-0002 (Figure 68-2) is a knife handle also in the shape of a whale-tail, from an unknown provenance on St. Lawrence Island. Its two sides are rounded and decorated with bands of lines and many small punctures.

Punuk culture is also popularized with a special form of wrist guard which has two curved, pointed prongs (Figure 69). Dumond (1977: 130, cited by Wardwell 1986: 105) has interpreted this style of wrist guard as a stylized walrus face. Walrus is a common animal motif shared by all prehistoric and historic Eskimo cultures.



**Figure 68. Ivory objects of Punuk culture in shape of whale tail.** UAMN collection. 1. 1-1933-8576, unidentified object, from Kukulik site, 10.9 cm length. 2. 1053-0002, knife handle, from St. Lawrence Island, provenance unknown, 11.1 cm length. Photograph by Feng Qu.



**Figure 69. Ivory wrist guard of Punuk culture from Kukulik site.** UAMN collection. 1-1933-8571, 5.6 cm length.

### **Birnirk Culture**

The Birnirk Culture occurred at the same period of the Punuk (AD 800 - 1200) and occupied the Chukchi Sea coasts of Siberia and Alaska (Dumond 2009). Birnirk culture derived its name from a site near Point Barrow, which was found by a Canadian ethnologist Vilhijalmur Stefansson in 1912. James Ford started to excavate the Birnirk and other sites around Point Barrow in 1932. In 1952, he conducted more systematic archaeological investigations of Birnirk and Thule cultures at this area and obtained full information about Birnirk culture and Thule culture (Ford 1959). Another systematic excavation of a Birnirk-Thule culture site was led by Dennis Stanford at the Walakpa during 1968 and 1969 (Stanford 1976).

Both Okvik culture and Ipiutak culture might have contributed to the development of Birnirk culture. Birnirk later stages seemed to have received Punuk influence (Arutiuv



& Fitzhugh 1988: 128). Ford's (1959) and Stanford's (1976) excavations have revealed that the structure of Birnirk semi-subterranean houses was composed of single room and a passageway. The inside room was equipped with floors of flanks, a hearth or lamp area, and a sleeping platform along the wall. Wall and roof were built with driftwood, whalebone, and sod (Anderson 1984; Dumond 1977; Ford 1959; Stanford 1976). Birnirk culture shared many common Eskimo implements with Okvik, OBS, Ipiutak, and Punuk cultures, which included umiak, kayak, harpoon head, counterweight, lance point, arrowhead, bird dart point, bird dart side prong, bolas ball, fish spear, snow goggle, men's knife handle, ulu handle, needle case, pottery paddle, clay lamp, cooking pot, iron point, and others (Ford 1959: 240-241). Lithic implements were relied on ground slate, also supplemented by chipped chert implements (Anderson 1984: 90). However, Birnirk had pronounced unique features which differed from other prehistoric Eskimo cultures. First, whaling equipments were scarce in both the Birnirk site and the Walakpa site. The evidence for the use of walrus ivory was poor. Most harpoon heads were made of antler rather than ivory. These phenomena suggest that Birnirk people were rarely hunting whale and walrus but seem to have relied on hunting of seals, birds, fish, and caribou (Anderson 1984: 91; Dumond 1977: 131-133). Second, in comparison with the Okvik, OBS, and Punuk Eskimos, the Birnirk culture had few engraving designs on the implements (Collins et. al. 1977: 9-10; Dikov 2004: 170-179).

Archaeological record of Point Barrow area shows that only a few numbers of Birnirk harpoon heads are ivory-made and the majority of them are made of antler. Many of them have no decoration while some of them bear simple incised lines which occurred in entire Birnirk and Thule phases (Ford 1959; Stanford 1976).

Birnirk harpoon heads were also found in many sites on St. Lawrence Island, which were successively interdigitated with Punuk and Thule artifacts in *situ* (Collins 1937; Geist & Rainey 1936). Figure 70 illustrates four samples of Birnirk harpoon heads excavated from the northeast beach slope of the Kukulik midden. All of them are made of antler. Specimens 3-1935-0084 (Figure 70-1) and 3-1935-0083 (Figure 70-2) are both attributed to Geist's and Rainey's Type G harpoon heads which are characterized by

“side blade slits parallel to the axis of a round hole, an open socket, slots for foreshaft lashings, a bifurcated spur curving out below the socket, and a general curve of the head” (1936: 203-204). Specimens 3-1935-0088 (Figure 70-3) and 3-1935-0098 (Figure 70-4) are attributed to Type H, which has been defined as featuring “side blades at right angles to the round line hole, an open socket, slots for foreshaft lashings, and a bifurcated spur” (204). Except for the specimen 3-1935-0084, other three harpoon heads all bear simple incised design consisting of longitudinal lines.

The decoration designs of Birnirk culture were characterized by “spurred lines, alternate spur motif, curved double lines, rows of dots or broken lines, drilled pits, and (rarely) the circle and dot” (Collins et. al. 1977: 10). The principle feature of Birnirk incised designs was “rows of dots and small arc-like figures—bands of two curved spurred lines flanked by dotted lines” (10). Although incised designs were only born by a few harpoon heads, they were still employed by many other tools and utensils such as ivory hooks, toggles, needle cases, ornaments, and so on (Ford 1959).

Birnirk pottery was decorated with concentric circles or spirals. The most common design was called “Barrow Curvilinear Paddled” which was impressed by pottery paddles on both vessels and lamps (Ford 1959: 204) (Figure 71).

The ivory sculptural artworks of Birnirk included human and animal images. Common animal images were polar bears and whales. Human dolls, which were made of bark, wood, and grass, are common in the Birnirk site (Figure 72). Most of them have clear sexual features indicated, and pregnant women were represented (Ford 1959: 229). Many small models of tools and implements, such as bows, Kayaks, harpoons, ulus, sleds, and lamps were also found and they were considered children’s toys by excavators (Ford 1959; Stanford 1976).



1



2

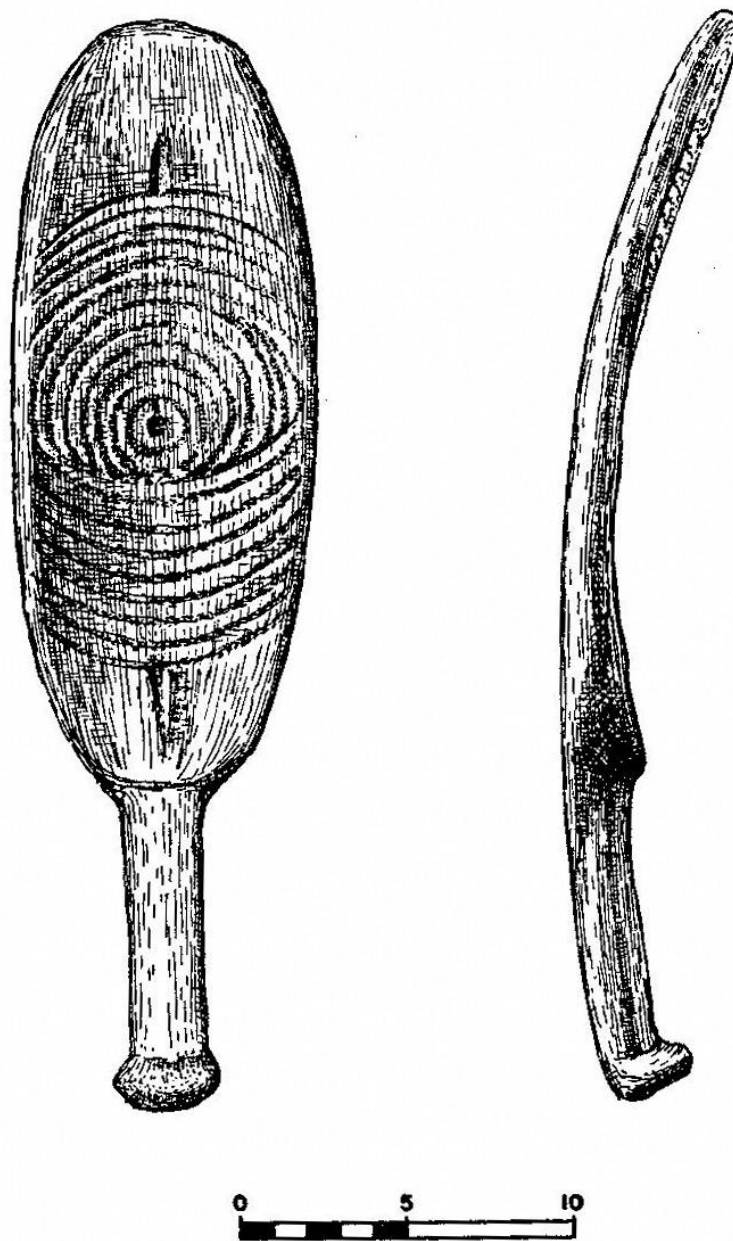


3

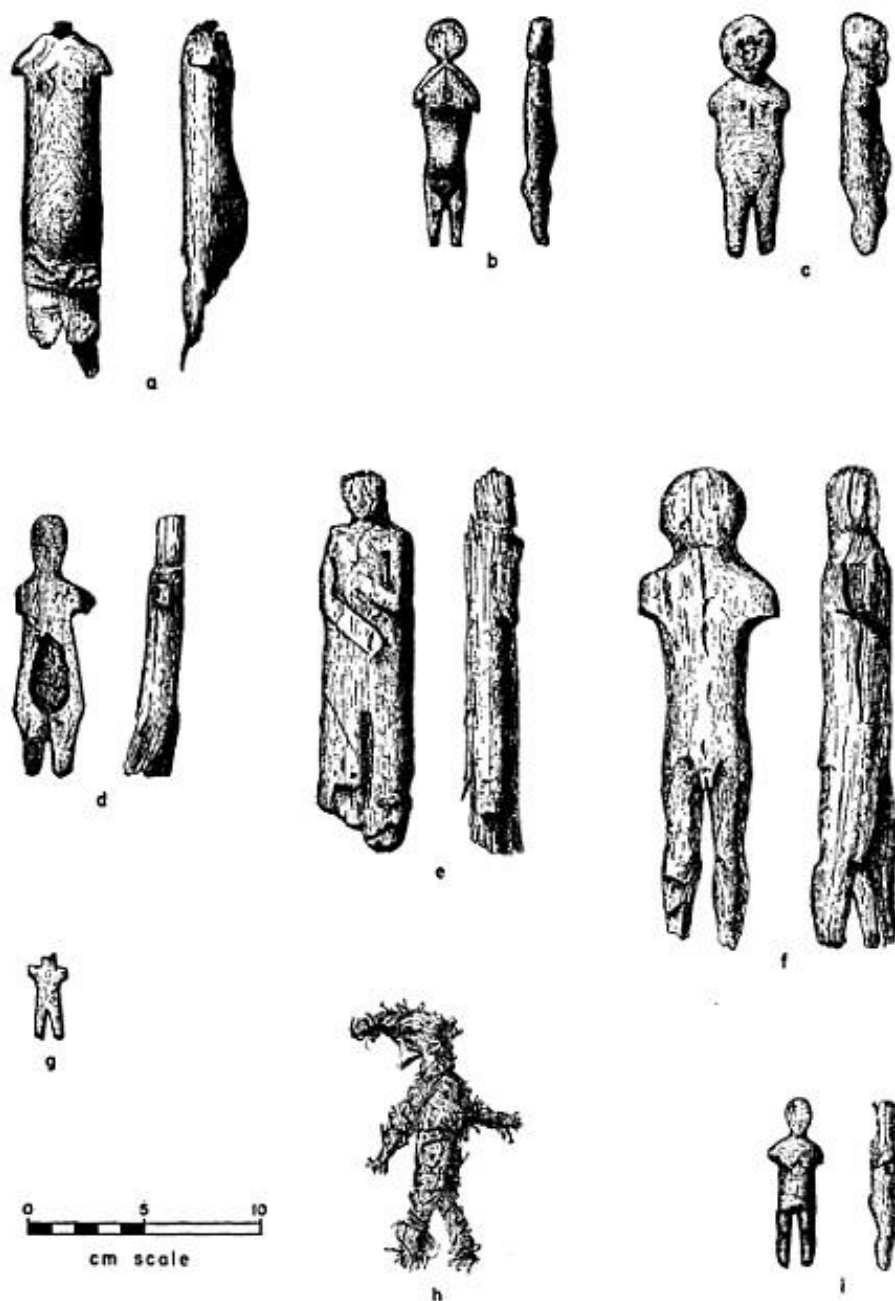


4

**Figure 70. Antler harpoon heads of Birnirk Culture from Kukulik site. UAMN collection. 1. 3-1935-0084, Type G, 10.8 cm length. 2. 3-1935-0083, Type G, 9.3 cm in length. 3. 3-1935-0088, Type H, 9.0 cm length. 4. 3-1935-0098, Type H, 7.2 cm length. Photograph by Feng Qu.**



**Figure 71.** Pottery Paddle made of whale bone, from Birnirk site. After Ford 1959: 204, Fig. 99.



**Figure 72. Dolls of Birnirk culture.** a-g, i. Bark dolls from Birnirk site. H. Grass doll from Nunagiak site. After Ford 1959: 224, Fig. 110.

### **Thule Culture**

The famous, so-called Thule migration from the northwest coast of Alaska eastward to northern Canada and Greenland began during the Birnirk period around AD 1000 (Anderson 1984; Dumond 1977; McGhee 2009). The Thule culture in Siberia and Alaska has been called “Western Thule” in order to differentiate from the Thule culture in North Canada and Greenland (Anderson 1984: 91; Giddings 1967: 80-101). There were obvious similarities in material cultures between Western Thule and Eastern Thule. These similar indications included large whaling harpoon heads, durable portions of floats, large open umiak for large sea mammal hunting, and the extensive tool-kit which contained bird and sea mammal darts, sealing harpoons, bows, arrows, bolas balls, fish spears, ice-picks, men’s knife, ulu, needle cases, combs, snow goggles, and so forth (Dumond 1977: 141). Numerous excavations of Thule components in Siberia and Alaska have been conducted. The Thule sites in Alaska have been found from the Norton Sound to Point Barrow area on the coast and interior areas (Anderson 1984; Dumond 1977). Thule culture has also been found in the Naknek River region of the Alaska Peninsula (Dumond 1977). In the Siberian side, the Thule influences expanded westward to the Bear Islands in the East Siberian Sea and southwestward from the Chukchi Peninsula to Anadyr’ Gulf and Shelikhov Bay on the north coast of the Okhotsk Sea (Ackerman 1984).

Thule cultural complex did not seem to have a single progenitor; its material goods developed from both Punuk and Birnirk cultures. In Point Barrow, prehistoric Eskimo culture underwent a gradual transition from the Birnirk phase to the Thule phase (Ford 1959; Stanford 1976), while on the coast of Norton Sound and Kotzebue Sound and on St. Lawrence Island, Thule phase displayed an evident Punuk influence (Bandi & Blumer 2002; Collins 1937; Dumond 2002; Giddings 1964, 1967; Giddings & Anderson 1986). In his analysis of harpoon heads of Thule culture derived from excavations at Cape Prince of Wales in 1936, Collins has revealed Birnirk elements with Punuk influences (Dumond 2002: 15-16). Through investigations of the cemeteries on St. Lawrence Island, Bandi and Blumer argue that Thule phase, as “a new cultural entity

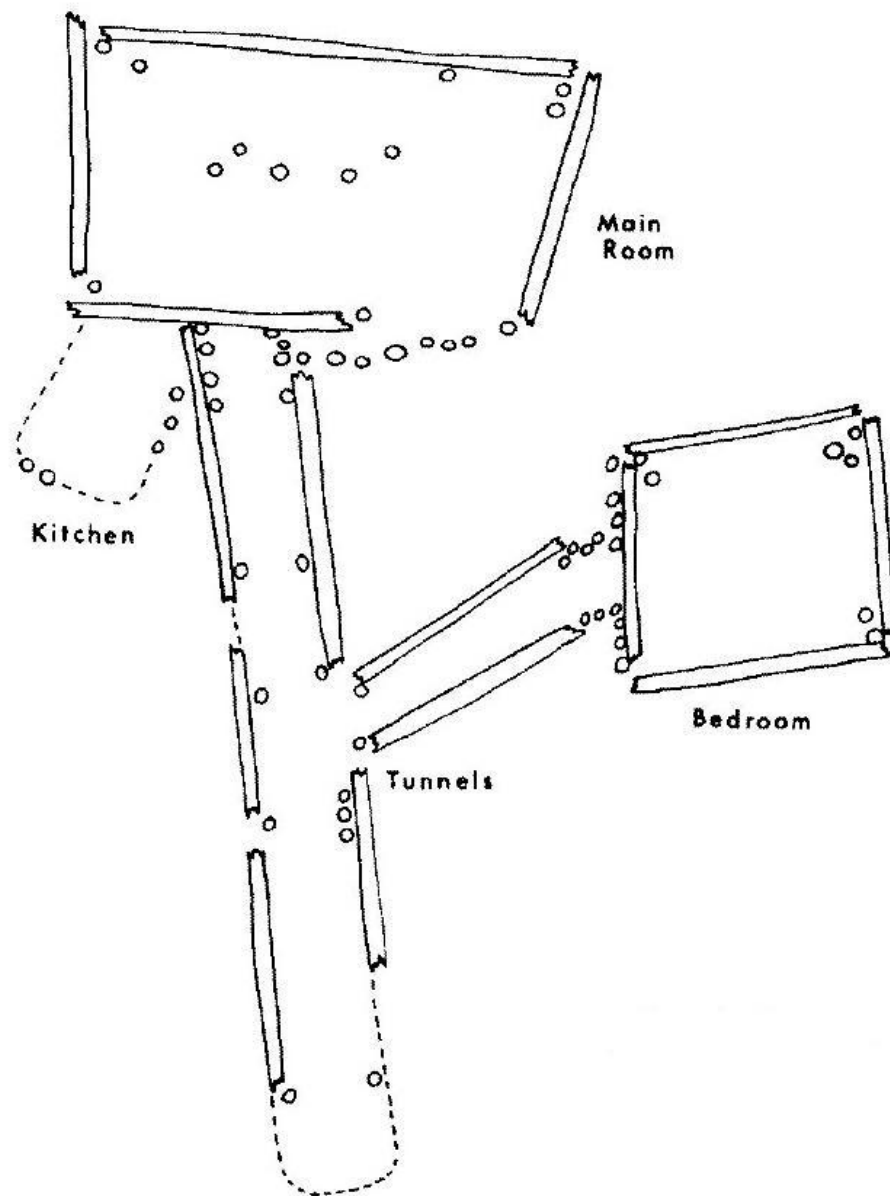
about AD 1200 to 1300,” occurred “by integration of the autochthonous elements of Punuk and Birnirk without population change” (2002: 41).

The Early Thule phase is generally considered to have begun around AD 1200 (Dumond 2009) and Late Thule is defined from AD 1400 to 1700 (Hollinger et al., 2009; Anderson 1984). However, the definition of the cultural period between Birnirk/Punuk and Historical Eskimo differs with different authors. In Collins’s report of St. Lawrence (1937) and Geist’s and Rainey’s report of the Kukulik (1936), for example, the Late Thule has been called “Recent Prehistoric Phase” or “Protohistoric Phase.” In my paper, Thule phase is the Eskimo culture prior to the historical period, namely, roughly from AD 1200 to 1700.

The whaling practice, which was almost abandoned by Birnirk culture, came back to Thule groups. Thule people “practiced sea mammal hunting (whale, walrus, seal), land mammal hunting (reindeer, bear, birds), and fishing; built large houses of stone, bone, turf and hide covering; developed dog driving, and used a raised frame sled;... continued their use of kayak and umiak; made pottery lamps (with wick flanges) and cooking pots; manufacturing the well-developed tool kit of bone, ivory, antler and wood; played a game of dice with small ivory bird figures; utilized slat armor, the compound reinforced bow, unbarbed arrow heads, labrets, ornaments, toys, and with some modification, winged needlecases and combs” (Ackerman 1984: 114-115). The whaling practice facilitated the reconstruction of social groups and appearance of larger settlements, which have been found at coastal whaling locations such as Point Barrow, Point Hope, Cape Prince of Wales, and Cape Krusenstern (Anderson 1984; Giddings 1967). The archaeological record of Cape Krusenstern shows that a fully developed Thule house, occupied by the chief whaling family, was structured with a long sunken entrance tunnel and multiple-room dwelling. The multiple-room was usually flanked by single-room dwellings, reflecting social organization adapted to the whaling activities (Giddings 1967: 80-101) (Figure 73).

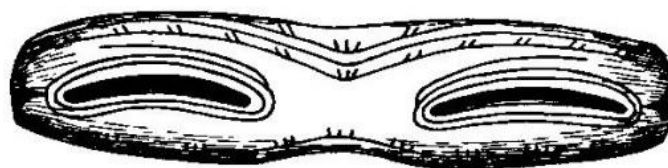
Thule culture had numerous regional variations. A coastal tribe was more likely to rely on sea mammal hunting, while a group living in an interior area might adapt to land-

based resources. In western Alaska, Early Thule components have been found at Onion Portage and Ahteut, which were located in Arctic woodlands. Many Late Thule groups were settling in the tundra regions at Brook Range, North Slope, and Kobuk and Noatak drainages (Ackerman 1984; Anderson 1984).

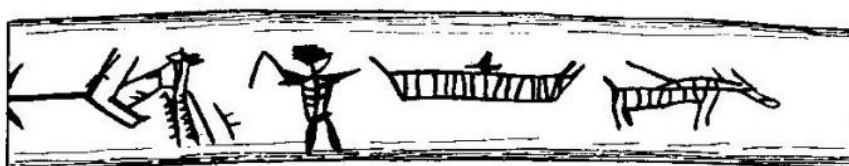


**Figure 73. Plan of Thule House 7, Cape Krusenstern.** Main tunnel length approximately 10 m. After Giddings 1967: 85, Fig. 19.

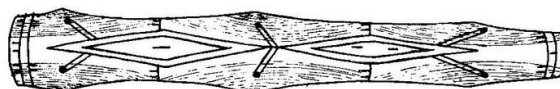




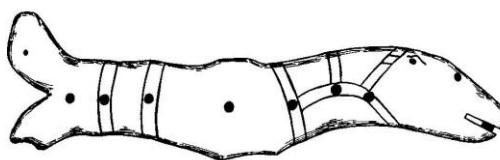
1



2

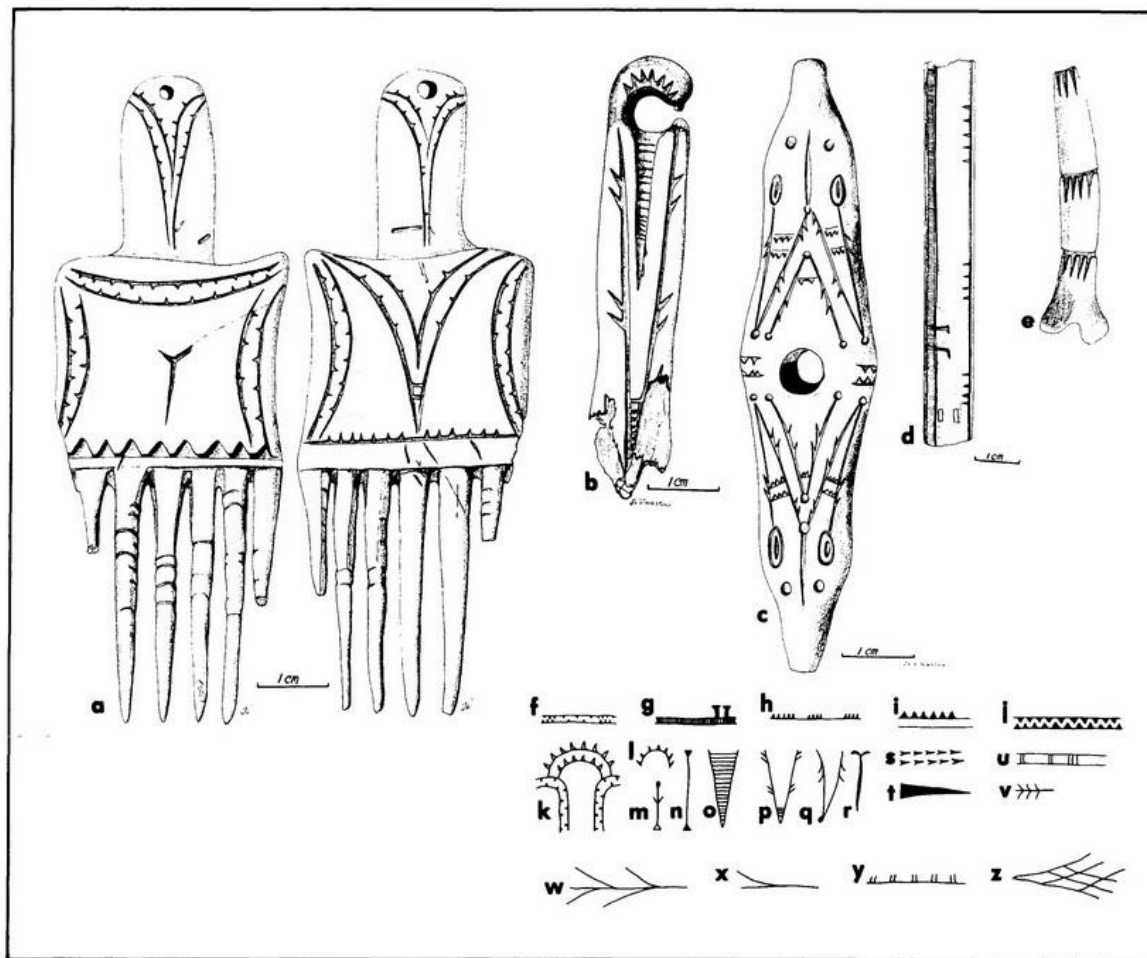


3



4

**Figure 74. Thule culture objects from Cape Krusenstern.** 1. Antler snow goggle, 13.3 cm in length. 2. Ivory bodkin, 18.4 cm in length. 3. Ivory needle case, 9.2 cm in length. 4. Seal-drag handle of ivory, 8.3 cm in length. After Giddings 1967: 91, 93, Fig. 24, 26, 27.



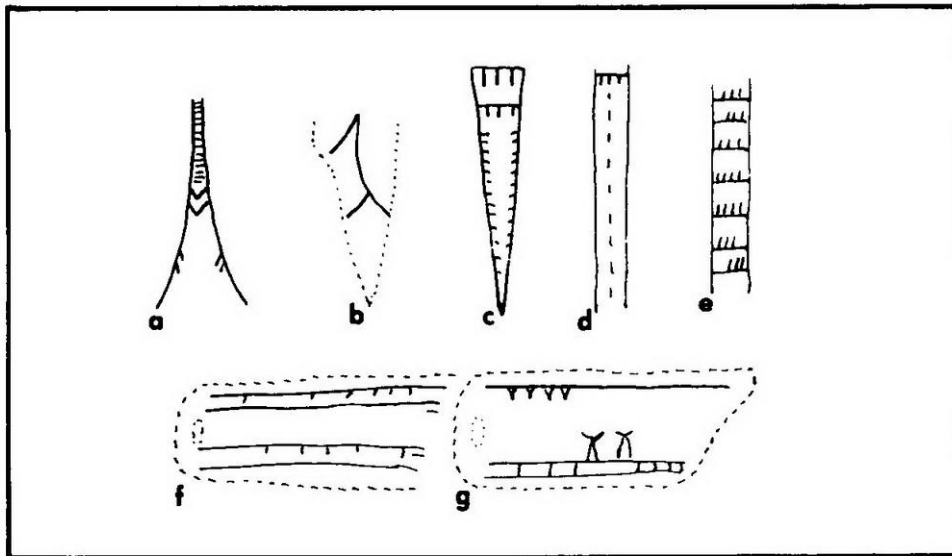
**Figure 75. Decorated elements from early Western Thule Houses 4, 5, and 6 at Cape Krusenstern.** After Giddings & Anderson 1986: 77, Fig. 52.

Scholars are generally inclined to think that the artistic tradition of prehistoric Eskimo cultures dramatically declined (Ackerman 1984; Collins 1973; Ford 1959; Mason 2009b; Stanford 1976). It is obvious that, like Birnirk culture, the Thule harpoon heads had few engravings. According to the archaeological record of Point Barrow area (Ford 1959; Stanford 1976), although the incised designs on other implements and the sculptural art continued in Thule phase, compared with Okvik, OBS, and Punuk cultures, they are relatively scarce in quantity. In the Walakpa site, several dolls and animal figures were found in both early and late Thule phases. A human head was carved at the end of a

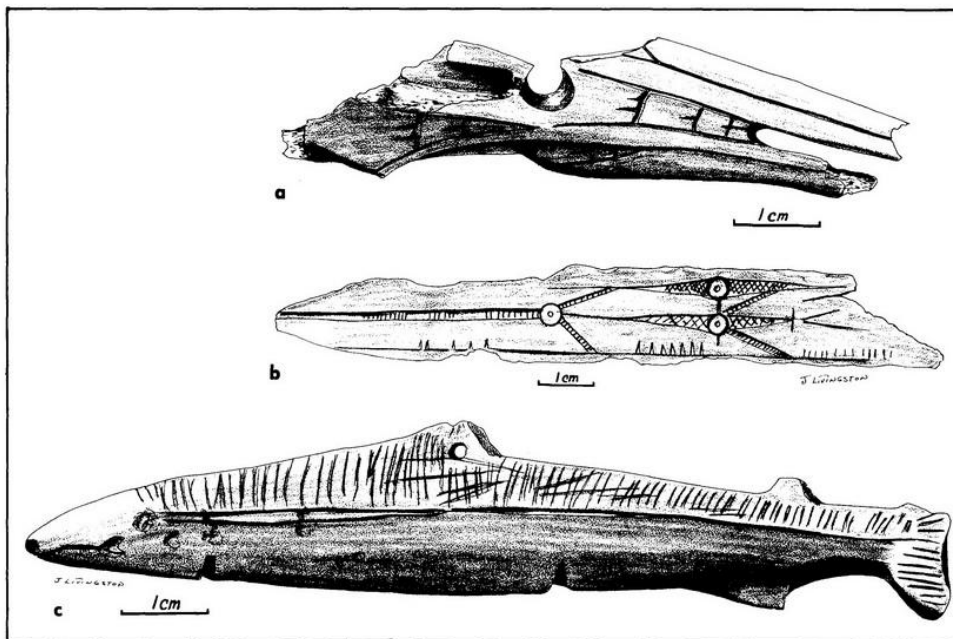
wooden rod. Animal figures included an ivory polar bear, two baleen whales, and a grass caribou (Stanford 1976: 62-64).

However, artistic tradition seemed to be thriving during Thule period and themes about human and animals were represented by Thule artifacts on the coastal areas of Norton Sound and Kotzebue Sounds and on St. Lawrence Island. In Cape Krusenstern, artifacts bearing geometric and representational designs included snow goggles, harpoon heads, combs, needle cases, handles, bodkins, and brow bands (Figure 74, 75, 76, 77). The geometric designs such as parallel, spurred, ticked, and dashed lines, triangles, circle dots, and V or Y-shaped figures were common through the entire Thule period from AD 1200 to 1400 at Cape Krusenstern. All of the brow bands found bear geometric designs which were characterized with singular, double, or triple lines paralleling the margins. Many lines are ticked with tiny triangles (Figure 76). Harpoon heads are frequently incised with triangles with horizontal lines, V figures, or simple elongated lines. An antler head of ivory from House 27 is decorated with a design composed of dotted circles, elongated triangles filled-in with net-like crossing lines and ladder-like figures (Figure 77-b).

Represented designs include birds, animals, and humans. An antler object depicts a bird which is identical to historical Eskimo drawings of a thunderbird. A seal-drag handle of ivory were carved with two animal heads: a seal head on one end and a bear head on the other (Figure 74-4). The most striking artwork from House 7 at Cape Krusenstern is a four-sided bodkin of ivory which depicts a realistic hunting scene of two standing men, who seem to cast weapons with throwing sticks, a sitting man in a boat, and a caribou bearing a spear in its shoulder. This artifact provides a clue in studying origins of pictographic ivory art of modern Inupiaq Eskimos. Human dolls were also found from the excavation at Cape Krusenstern. In addition, many fishing lures of ivory or antler are carved in fish form and has inset eyes and engraved gills (Figure 77-c). An ivory doll (Figure 78), representing the finest art of Thule culture, was indicated with female features of breasts and genitalia and was incised with converging lines on both front and back sides (Giddings 1967: 90-97; Giddings & Anderson 1986: 64-85).



**Figure 76. Decorative elements from late Western Thule House 25a at Cape Krusenstern.** After Giddings & Anderson 1986: 64, Fig. 43.



**Figure 77. Decorated objects from late Western Thule House 27 at Cape Krusenstern.** After Giddings & Anderson 1986: 67, Fig. 46.



**Figure 78. Ivory doll of Thule culture from Cape Krusenstern. 9.5 cm height. After Giddings 1967: 97, Fig. 30.**

The Thule assemblage in the Kukulik site represented the latest phase of Thule culture and is defined as “Recent Prehistoric” culture. Thule harpoon heads excavated from the Kukulik site usually do not bear incised designs (Figure 79). The large whaling harpoon heads were common for the Kukulik occupants during this period (Figure 79-4). However, incised designs were still employed to decorate other implements. UAMN specimen 1-1931-0623 (Figure 80) is an ivory ornament excavated from the Kukulik site. Each side is decorated with two large and four small compass-made nucleated circles. Thule people on St. Lawrence Island continued to make many human and animal figures, which were made of either ivory or wood. There are numerous tiny dolls of ivory which

were found in the Kukulik site (Figure 81-1, 81-2, 81-3, 81-4, 81-5, 81-6). The bigger dolls are usually made of wood (Figure 81-7, 81-8). Most dolls only have head and torsos crudely carved but facial features and four limbs were not indicated.



1



2



3



4

**Figure 79. Ivory harpoon heads of Thule culture from Kukulik site. UAMN collection.** 1. 1-1935-0078, open socket, 11.2 cm in length. 2. 1-1935-0081, open socket, 11.1 cm in length. 3. 1-1935-0082, close socket, 6.0 cm in length. 4. 1-1931—0859, whaling harpoon head, close socket, 23.0 cm in length. Photograph by Feng Qu.



**Figure 80. Decorated ivory ornament of Thule culture from Kukulik site.** UAMN collection. 1-1931-0623, 6.5 cm length.

Animal carvings also used ivory and wood as major materials during Thule period on St. Lawrence Island. The themes of animals were the same as the previous cultures, including seal, walrus, polar bear, and whale which were made of either ivory or wood (Figure 82, 83). During Late Thule phase, numerous flat-bottomed ivory birds were made. A few of them bear incised designs composed of parallel lines and small punctures (Figure 82-3, 82-4). The general explanation is that they were used for a children's game. However, some of them have drilled holes at the end, suggesting they might be fastened to other implements as charms (Fitzhugh & Kaplan 1982: 246). One more new art phenomenon occurred in Late Thule culture, which continued in the historical period, is the flocks of small-sized land animals. They were usually measured from four to seven cm in length, and the main themes are bear, fox, wolf, and dog (Figure 84).

Thule artistic embellishment can be confirmed by the Nukleet assemblage from the Nukleet site and the Iyatayet site at Cape Denbigh, which were excavated by James

Giddings in 1948 and 1949 (Giddings 1964). Collection from these two sites is now housed in UAMN, therefore I was able to observe the Nukleet artifacts closely.



**Figure 81. Human figures of Thule culture from Kukulik site.** UAMN collection. 1. 1-1934-3966, ivory, 3.2 cm height. 2. 1-1934-3970, ivory, 4.3 cm height. 3. 1-1934-3969, ivory, 4.4 cm height. 4. 1-1934-3975, ivory, 5.0 cm height. 5. 1-1934-3973, ivory, 2.3 cm height. 6. 1-1934-3971, ivory, 3.8 cm height. 7. 1-1934-4808, wood, 12.9 cm height. 8. 1-1934-4798, wood, 8.4 cm height. Photograph by Feng Qu.





5

**Figure 82. Ivory animal figures of Thule culture from Kukulik site. UAMN collection.** 1. 1-1933-8299, walrus, 7.4 cm in length. 2. 1-1931-0566, twin whales, 3.4 cm in length. 3. 1-1934-1659, bird, 5.5 cm in length. 4. 1-1934-1682, bird, 3.5 cm in length. 5. 5-1934-2758, bear, 14.9 cm in length. Photograph by Feng Qu.



1



2

**Figure 83. Wooden animal figures of Thule culture from Kukulik site. UAMN collection. 1. 1-1935-5308, bear, 16.1 cm in length. 2. 1-1934-4804, seal, 10.1 cm in length. Photograph by Feng Qu.**



**Figure 84. Ivory fox figures of Late Thule culture from Kukulik site. UAMN collection. From up to below: 1-1933-8291, 5.5 cm in length; 1-1933-8290, 6.0 cm; 1-2933-8293, 6.6 cm; 1-1933-8289, 6.2 cm. Photograph by Feng Qu.**

Nukleet people were likely to be a single group of families who lived there from the twelfth to the eighteenth century. Most of harpoon heads found from the Nukleet site are made of antler and only a few numbers are made of ivory. Although most antler harpoon heads have no decoration, the ivory harpoon heads as well as a few antler ones still bear incised designs. UAMN specimens 1-1949-2650 (Figure 85-1) and 1-1949-2666 (Figure 85-2) are antler harpoon heads with a close socket and simple line designs. 1949-2652 (Figure 85-3) is an ivory harpoon head with open socket and is decorated with slightly curved, longitudinal lines. It is worth noting that the traditional double concentric circles resembling eyes are still used by Thule people at the Nukleet site. 1-1949-2653 (Figure 85-4) and 1-1949-2655 (Figure 85-5), both ivory harpoon heads, are decorated with multiple compass-made double nucleated circles. The circles on 1-1949-2653 are attached with four spurred lines. This eye motif is still a popular embellishment for sea hunting tools among historical Yup'ik Eskimos (Figure 107).

Incised designs were also used by Nukleet people to decorate other implements such as needle cases, cord attachers, fasteners, creasers, and other antler, ivory and wooden objects (Figure 86). Interestingly, there are numerous brow bands made of antler which were found in Nukleet culture through the whole period of occupation of the site. Many of them were elaborated with incised designs (Figure 87, 88). The motifs engraved on the Nukleet brow bands and other objects mainly include “the line with short cross lines,” “the double line with alternating cross lines,” “the double line of alternating, small, hatched fields and larger, blank fields,” “the Y-ornament,” “the compass-made circle with central dot,” and “the compass-made circle and dot with outward-ticked lines” (Giddings 1964: 97).

The motifs on Nukleet brow bands were obviously inherited from Punuk art. The therianthrope head of OBS and Punuk culture, represented by paired concentric circles or ovals, was also employed by the Nukleet people. UAMN specimen 1-1949-4095 (Figure 89-1), excavated from the Iyatayet site, and 1-1949-40 (figure 89-2), excavated from the Nukleet site, are both ivory cord attachers as an equipment for seal hunting.

Both artifacts are decorated with paired nucleated circles. On four sides of the artifact we can recognize four animal heads represented by the round, staring eyes.

Most animal figures were small piece of ivory implements. The common animals are polar bear, seal and walrus, similar to carvings from OBS and Punuk cultures. UAMN specimen 1-1949-4093 (Figure 91-1), a needle case, is ornamented with two carved polar bear heads on two rims. A line attacher, 1-1949-4158 (Figure 90), was carved also in bear shape. Its ears, toothy mouth, and plugged eyes are well indicated. Three rows of circular pits connected by lines are ornamented on neck and back region. The pits still retain bases of feathers, indicating it was ornamented with a crest of feathers when it was in use. Giddings (1964: 79) argues that this Nukleet piece stylistically resembles some animal heads implements from the Okvik site on Punuk (Rainey 1941a: 518-519) (Figure 24-1, 24-5).

There were also some implements which were carved in seal and walrus shape. 1-1949-2903 (Figure 91-2) is a bladder mouth piece, carved in a seal shape, and 1-1949-4161 (Figure 91-3), possibly a creaser, was sculpted into a walrus. Among all Nukleet sculptural pieces, a very small walrus head button with only 1.4 cm height and 1.3 cm length, was finely made. Giddings (1964: 79) suggests that this Nukleet button similar to some small buttons of OBS culture in bird shape found on St. Lawrence Island (Collins 1937: 50-51; Geist & Rainey 1936: 214, 221) (Figure 47).

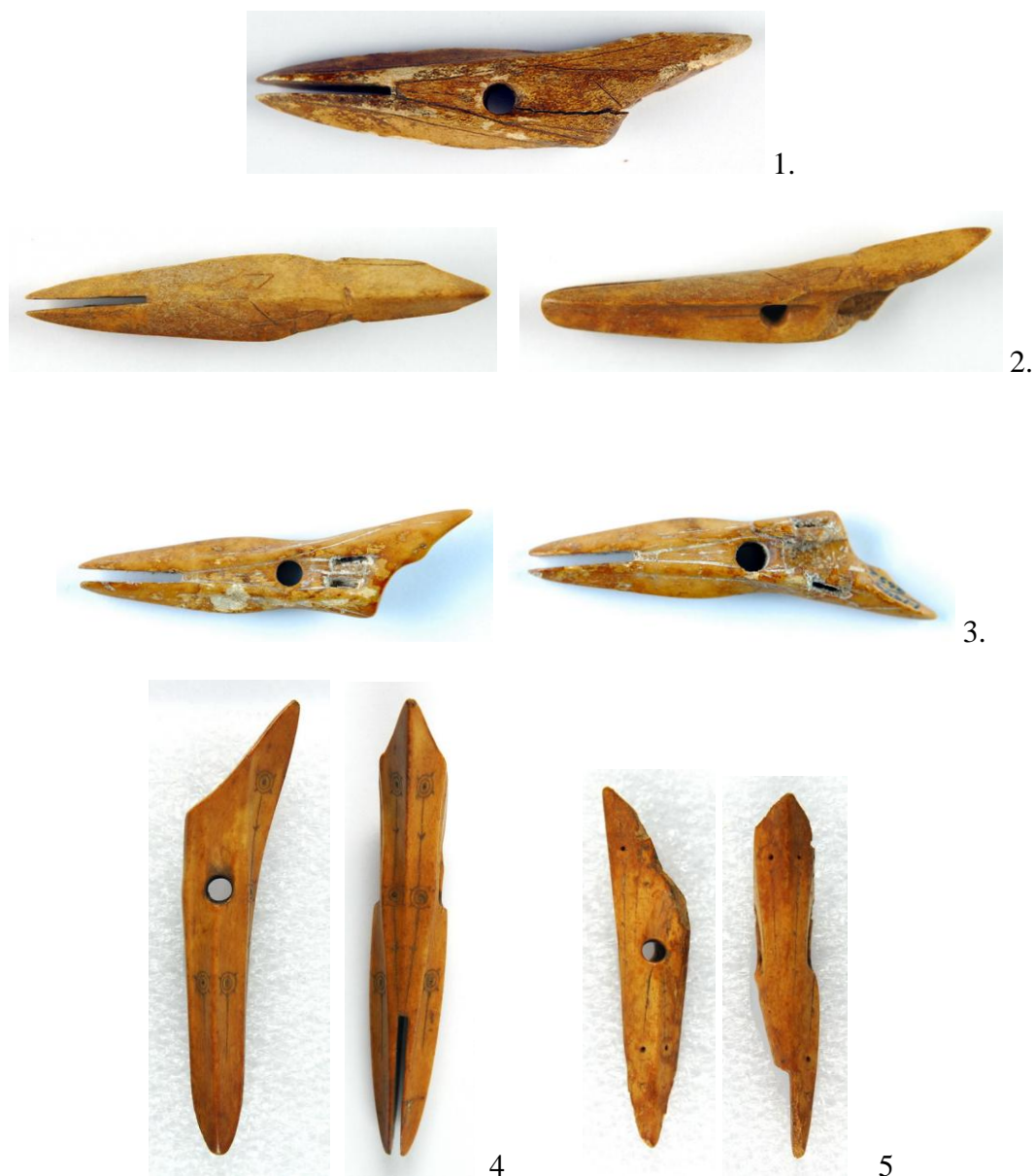
A total of forty whole and fragmentary dolls from the excavations of the Nukleet site are now housed in UAMN. Thirty nine dolls are made of wood and bark, whereas one comb in human form is made of antler. Some of them are faceless (Figure 92-1, 92-3, 92-7, 93-2), while others are carefully indicated with facial features (Figure 92-2, 92-5, 93-1, 93-3). Many of dolls are females by the indications of breasts and short trunks (Figure 92-1, 92-2, 92-4, 92-7). Some dolls are badly damaged and they seem to be deliberately destroyed. 1-1949-0660 (Figure 92-4) is a broken bark doll with missing head and broken legs, and 1-1949-0628 (Figure 92-6) is only a fragment of a bark doll's left legs. 1-1949-0638 (Figure 92-5) is a wooden doll with missing two legs, one arm, and below part of the torso because of being burned. The burn mark still retains.

1-1949-0246 (Figure 93-1) and 1-1949-0655 (Figure 93-2) are both combs in human form. The former is made of antler and eyes and mouth are clear marked. Its body is decorated with an incised design composed of converging lines and short cross lines. 1-1949-0648 (Figure 93-3) is a slender wooden human figure and its long and thin legs were used as a fork. Eyes and mouth are well indicated on this doll. The Eskimo custom of human-formed comb or fork can be traced back in OBS culture (Arutiunov & Sergeev 2006[1975]).

These wooden dolls were all excavated from the lower levels in Nukleet site. Superficially Nukleet dolls were only used during the earlier period of occupation. However, in Gidding's speculation, it is more likely that this phenomenon actually relates "somewhat to the better preservation of organic materials in the permanently frozen parts of the mound" (1964: 91).

Nukleet excavation also yielded some models of dishes, trays, open boats and kayaks which were carved from bark (Figure 94).

To sum up, my investigations in this section refute the statement that Thule phase had few artistic works and dropped off from prehistoric Eskimo aesthetic tradition (Collins 1973; Ford 1959; Mason 2009b; Stanford 1976). This "Thule art decline" conclusion, in my point of view, is built biasedly on the data from Point Barrow area and other sites on Chukchi coasts, but is unaware of archaeological records of several sites such as Nukleet and Cape Krusenstern which possibly received influence from Punuk culture. From my above research, I believe that some Eskimo groups on the coasts of Norton Sound and Kotzebue Sound are the bearer of the artistic tradition of Okvik, OBS, and Punuk cultures, even though the styles and forms may vary and some changes occurred through time. They finally passed on these general art forms to historical Eskimos in the local and adjacent regions.



**Figure 85. Ivory and antler harpoon heads of Thule culture from Nukleet site.** UAMN collection. 1. 1-1949-2650, antler, 8.0 cm length. 2. 1-1949-2666, antler, 7.8 cm length. 3. 1-1949-2652, ivory, 7.1 cm length. 4. 1-1949-2653, ivory, 8.0 cm length. 5. 1-1949-2655, ivory, 7.8 cm length. Photograph by Feng Qu.





**Figure 86. Ivory and wooden decorated objects from Nukleet site. UAMN collection.**  
 1. 1-1949-4107, ivory bag handle, 18.0 cm length. 2. 1-1949-4098, ivory tool, 8.0 cm length. 3. 1-1949-4102, wooden tool, 14.1 cm length. 4. 1-1949-4092, ivory needle case, 3.9 cm length. 5. 1-1949-4147, ivory ornament, 2.1 cm length. 6. 1-1949-0714, ivory pendant, 2.9 cm length. Photograph by Feng Qu.





1

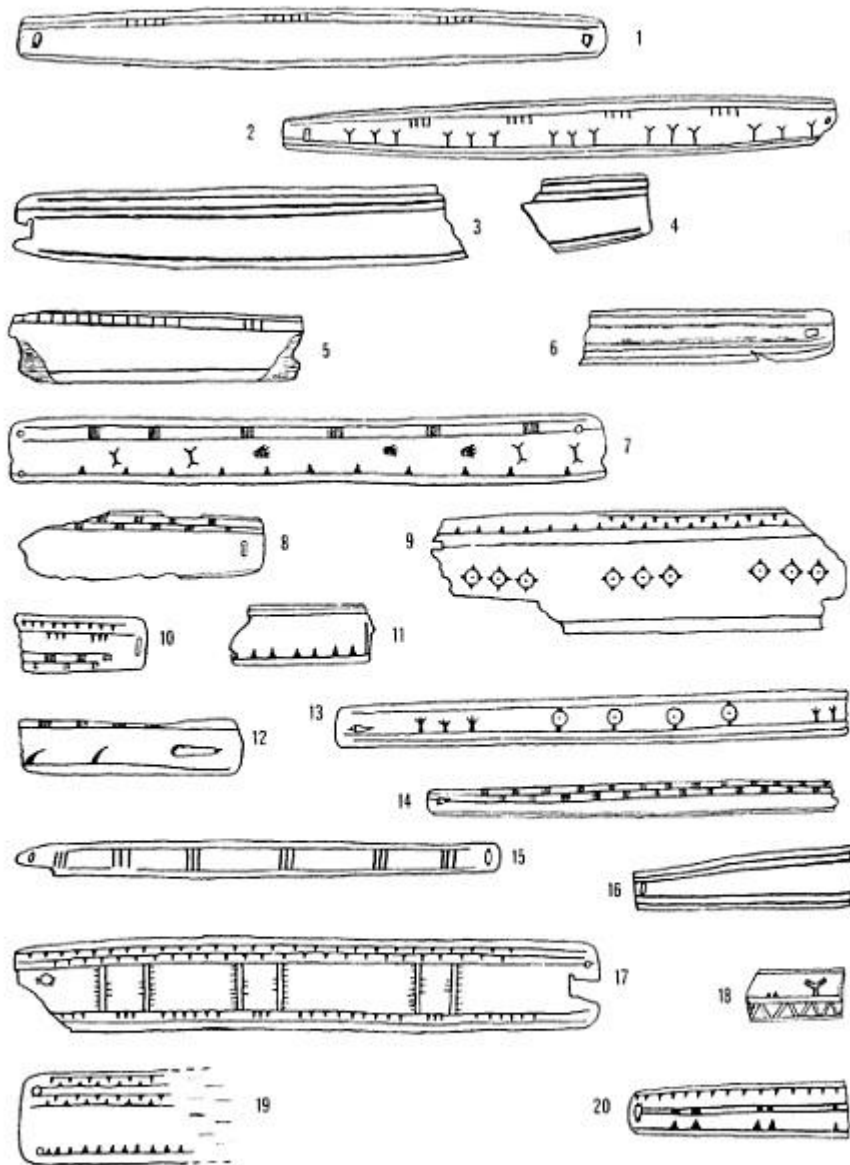


2



3

**Figure 87. Antler brow bands from Nukleet site. UAMN collection. 1. 1-1949-0754, 6.4 cm length. 2. 1-1949-0753, 15.2 cm length. 3. 1-1949-0728, 17.0 cm length. Photograph by Feng Qu.**



**Figure 88. Brow bands from Nukleet site. After Giddings 1964: 98, Fig. 21.**



1



2

**Figure 89. Ivory cord attacher of Thule culture from Iyatayet site and Nukleet site.** UAMN collection. 1. 1-1949-4095, from Iyatayet site, 3.7 cm length. 2. 1-1949-4094, from Nukleet site, 3.4 cm length. Photograph by Feng Qu. Drawing after Giddings 1964:44.



**Figure 90.** Bear head line attacher of ivory from Nukleet site. UAMN collection. 1-1949-4158, 5.0 cm length. Photograph by Feng Qu.

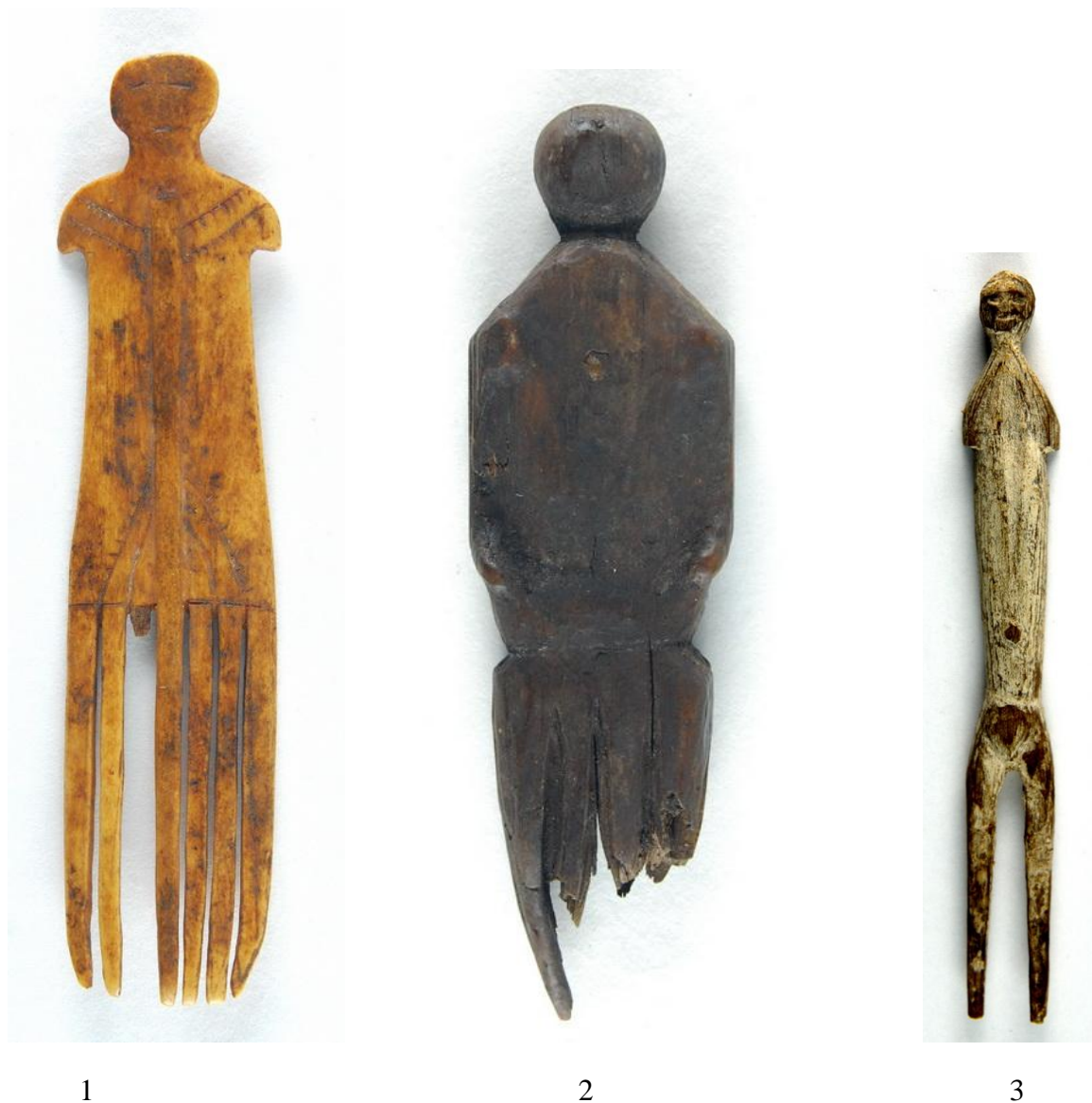


**Figure 91. Ivory animal figures from Nukleet site.** UAMN collection. 1. 1-1949-4093, needle case with polar bear head, 8.1 cm length. 2. 1-1949-2903, bladder mouth piece in seal shape, 6.0 cm length. 3. 1-1949-4161, creaser (?) in walrus shape, 8.1 cm length. 4. 1-1949-4105, walrus head button, 1.4 cm height. Photograph by Feng Qu, drawing after Giddings 1964: 79, Fig. 19.





**Figure 92. Wooden and bark dolls from Nukleet site.** UAMN collection. 1. 1-1949-0634, wood, female, 10.6 cm height. 2. 1-1949-0645, wood, female, 10.6 cm height. 3. 1-1949-0663, 1-1943-0651, bark, both 13.5 cm height. 4. 1-1949-0660, bark, female, 7.8 cm in height. 5. 1-1949-0638, wood, 7.1 cm height. 6. 1-1949-0628, bark, 7.0 cm height. 7. 1-1949-0629, wood, female, 5.2 cm height. Photograph by Feng Qu.



**Figure 93. Combs and fork in human form from Nukleet site. UAMN collection. 1. 1-1949-0246, antler comb, 13.4 cm length. 2. 1-1949-0655, wooden comb, 12.6 cm length. 3. 1-1949-0648, wooden fork, 9.2 cm length. Photograph by Feng Qu.**



**Figure 94. Bark dish models from Nukleet site.** UAMN collection. From left to right: 1-1949-0588, 6.3 cm length; 1-1949-0587, 5.0 cm length. Photograph by Feng Qu.

### Ipiutak Culture

Ipiutak Culture was contemporary to OBS culture during the period from AD 400 to 900 (Dumond 2009; Fitzhugh 2009b), and was distributed at coastal and interior areas from Seward Peninsula to Point Hope in northwestern Alaska. The Ipiutak site at Point Hope was discovered in 1939 by Helge Larsen of Danish National Museum in Copenhagen, Froelich Rainey, and Louis Giddings, and excavated in 1939 - 1941 (Larsen & Rainey 1948; Rainey 1971). The other large Ipiutak sites include settlements at Cape Krusenstern and Deering settlement (Mason 1998).

Ipiutak site occupies a large area, nearly 28,000 m<sup>2</sup>, containing more than 600 semi-subterranean houses and around 140 burials. The Ipiutak house has a square or rectangular form with rounded corners in ground plan, and most houses were between



four and five square meters and had entrance passages from two to five meters in length. The ground plan was also characterized by a central hearth, the floor, and the sleeping platform along three walls. Driftwood was used in construction for building of walls and platforms. There are no stones or whale bones used for house buildings. The Ipiutak cemetery is at 560 meters southeast of the village site. Two types of burials can be recognized. The first type is simple and shallow burials and the human skeleton (usually no articulated) and grave goods are scattered. The second type is burials in log coffins and most of them are deeply deposit with articulated skeletons (Larsen & Rainey 1948; Rainey 1941b, 1971).

Other important Ipiutak cultural sites include Cape Krusenstern and Deering (Giddings & Anderson 1986; Mason 1998). According to the discovery of Krusenstern Ipiutak houses, Mason evaluates that the scale of Ipiutak population at Cape Krusenstern was similar to that at Point Hope. However, the Deering site has a settlement size twice of that of the Point Hope site (1998: 276-279).

Scholars usually distinguish Ipiutak culture from the Northern Maritime tradition because many common objects used by Northern Maritime cultures are lacked in the Ipiutak assemblages, such as ground slate implements, clay lamps, and cooking pots (Collins 1973; Dumond 1977; Mason 1998; Rainey 1941b, 1971). As Rainey (1941b) has described, in Ipiutak culture,

there appear to be no ice picks for the butts of thrusting harpoons used in hunting on the sea ice by Eskimos of all periods; no finger or hand rests for thrusting this type of harpoon; and no plugs or mouthpieces for sealskin floats used with the harpoon when hunting in open water – implements common to all periods known on the western Arctic coast. Other typical western Eskimo traits lacking at Ipiutak and normally represented by large numbers of implements at each site, are women's knives or ulus, all forms of polished slate, lance, harpoon, and knife blades, pottery, seal oil lamps, and sled shoes. Flint implements, representing a much more finished technique in chipping than any previously known in the Arctic, take the place of the

familiar Eskimo slate tools; a peculiar long lance head, with inset flint side blades apparently replaces in part toggle headed harpoons; the use of the seal oil lamp was unknown; and if the Ipiutak people used sleds at all, they must have been made entirely of wood. (pp. 370)

The number of implements for sea mammal hunting is much smaller than of archery implements in Ipiutak culture. There are 1172 arrowheads found in the Ipiutak site, and, in total 2240 artifacts are related to archery, if arrow points, side blades, bird arrow heads, and wooden bows are added. In contrast, the collection of artifacts for sea mammal hunting only includes 159 harpoon heads, nine harpoon socket pieces, forty six foreshafts, and a few number of other related implements (Larsen & Rainey 1948). Rainey suggests that the large number of arrowheads evidence the popularity of land animal hunting and “the Ipiutak people were basically an inland people, normally dependent upon land game, who came to the coast for seasonal sea mammal hunting” (1941b: 370). However, Mason argues that Ipiutak archery was most likely used for warfare (1998: 273).

Larsen and Rainey have categorized Ipiutak harpoon heads into four types. Type 1 is slender than Type 2, usually with an open socket, a multi-pronged spur, and side blades (Figure 95-1). Type 2 has a rather widespread form, an end blade of chipped flint, a close socket, and three-pronged lateral spur (Figure 95-2). Type 3 is the miniature harpoon head with a slender and pointed form, side blades, and a close socket. Type 4 is the widespread harpoon with an end blade and an open socket. Majority of Ipiutak harpoon heads belong to Type 1 and 2. Type 3 and 4 are few. Many of them are incised with straight or curved lines. It is worth noting that Ipiutak harpoon complex does not include counterweight (Larsen & Rainey 1948: 68-77).

A large numbers of arrowheads were used by the Ipiutak people. With very few exceptions they are all made of antler. The Ipiutak arrowheads have two most common forms. The first type is the arrowhead with side blades and the other type has a flint blade set into a slit (Figure 96). Almost all arrowheads have four incised, longitudinal lines

which divides the surface of an arrowhead into four equal spaces (Larsen & Rainey 1948: 63-65). These lines are much different from the elaborate designs on other implements.

Some scholars are inclined to consider the Ipiutak culture a continuing evolution of the Norton tradition. First, Ipiutak groups used the same stone tools, such as projectile blades and sideblades, as the Norton people. Except for the ground-slate tools, which were absent in the Ipiutak culture, the Norton people and Ipiutak people generally shared similar lithic technology. Second, both Norton and Ipiutak relied on seasonal inland caribou hunting and coastal sea mammal hunting, and they shared similar economic styles (See Collins 1973; Dumond 1977; McGhee 1976). However, this suggestion neglects the great difference in artistic production between the Norton tradition and the Ipiutak culture. The former produced very few art designs while the latter produced abundant artistic designs and animal figurines.

Some engraving designs in Ipiutak culture are similar to Okvik culture, especially those on harpoon heads which are characterized by straight lines, while other motifs on ivory, bone, or antler artifacts are similar to those of OBS culture. The design elements in common include “circle and dot, spurred circles, circular and oval panels, strait or curved lines, combinations of light and heavy lines, broken lines, double lines, spurred lines,” and jet inlays similar to baleen and ivory inlays in OBS (Collins 1973: 11). Some ivory lance heads and daggers are decorated with circles and ellipses (Figure 100-2). Therianthropic design represented by eye and toothy motifs was also common in Ipiutak culture. This semi-human face was often engraved on ivory plaques. Two such plaques which were excavated from Burial 61 both have engravings of eyes, nostrils, and large U-shaped, toothy mouth (Figure 97). However, the U-shaped figure was a unique motif only seen on the Ipiutak artifacts (see Larsen & Rainey 1948: 136-137). UAMN specimen 1941-5433 (Figure 98), an ivory lance head from House 70, shows such a figure on one surface.

Also similar to OBS culture, many implements were carved in form of an animal. Harpoon socket pieces are often sculpted into an animal shape. Daggers, knife handles, and adze heads were also shaped in zoomorphic images. These sculptures represented

bears, wolves, seals, and loons, as well as reptiles and amphibians. A walrus figure from Burial 42, Ipiutak site has slashing holes in its front and back flippers, demonstrating it was originally attached to other implements. It is worth noting that its body bears skeleton design. The spine and ribs are represented by alternating heavy and delicate lines (Larsen & Rainey 1948: 125-126; Mason 2009b: 123) (Figure 99). UAMN specimen UA72-049-0001 (Figure 100-1) is a rake-like ivory carving, collected from Point Spencer, Seward Peninsula. The main figure carved on the rake is a bear while a small seal is attached to the handle. Two others were found in Ipiutak site (Collins 1973: 24; Larsen & Rainey 1948: 145).

These design similarities lead Mason to consider that Ipiutak culture was much closer to Okvik and OBS cultures than to Norton traditions (1998, 2009b). However, in my argument, the discrepancy overruns the homogeneity between Ipiutak and Okvik/OBS art designs. Even though both Ipiutak and Okvik/OBS art productions shared similar carving and incising technologies, Ipiutak culture has evidently unique characteristics in artistic designs which demonstrate its particularity and its different origins from Okvik and OBS art tradition. The first distinguished Ipiutak cultural feature is skull design. Two human skulls, found in a burial at the Ipiutak cemetery, were adorned with jet or ivory inlays as artificial eyes, ivory nose plugs, and ivory mouth cover. A loon skull, also found in the Iiutak cemetery, was also inlaid with jet pupils in the eye sockets (Larsen & Rainey 1948: 119-120). Second, many openwork carvings, which represent human or bird figures, as well as ivory chains were found (Figure 100-3). Larsen and Rainey suggest that they might be used by Ipiutak ancestors as shamans' regalia attached to shamans' costumes and that these new elements in Ipiutak culture may reflect the influences from Northern Siberia and East Asia (146-161). Third, the composite burial mask also represented one of the unique features of Ipiutak culture. Different from other Ipiutak ivory carvings, such ivory masks show low relief on the surface. The mask has clear indications of eyes, nose, and mouth with labrets to form a human face. There are also three animal heads carved on the forehead. Connectors of the mouth were carved in forms of larvae (Larsen & Rainey 1948: 137; Mason 2009b: 117)

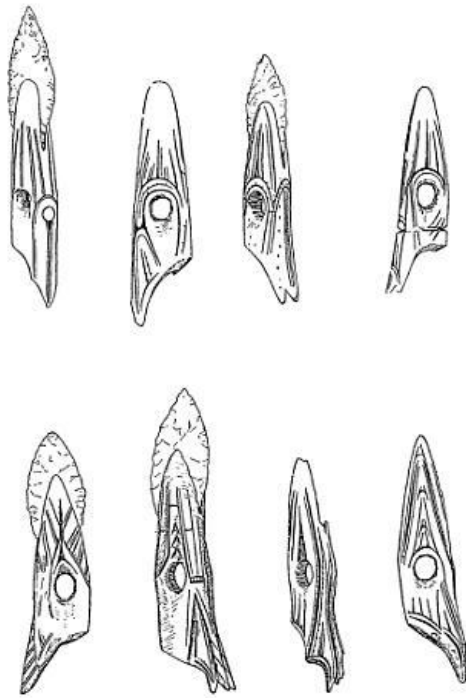
(Figure 101). Comparing the Ipiutak ivory mask carvings with the composite Chinese masks made of sections of shell and stone during Shang and Zhou periods (1600 – 256 BC), Collins has suggested the influence of early China on prehistoric Eskimo culture (1971).

The cultural differences between Ipiutak culture and Norton tradition were also evident. First, as abovementioned, the fundamental characteristic of Ipiutak culture which distinguished it from Norton tradition was its strong art tradition. The typical Ipiutak carvings such as composite burial masks, engraved plaques, incised daggers, and open works had no traces in the ASTt and Norton Assemblages. Second, some typical Norton artifacts were absent in Ipiutak culture, such as pottery, ground slate, and oil lamps (Dumond 1977; Larsen & Rainey 1948; Mason 1998). These phenomena seem to imply that Ipiutak culture had an origin different from ASTt and Norton traditions.

There are many elements of Ipiutak culture which have been demonstrated to be from the exterior cultures. 1) The flint industry was not used by other prehistoric Eskimo cultures in the Bering Strait region, suggesting an intellectual tradition from the outside world (Dumon 1977; Larsen & Rainey 1948; Rainey 1941b, 1971). 2) The animal carvings exhibited evident Scytho-Siberian artistic style (Larsen & Rainey 1948; Mason 1998). 3) The numerous openwork carvings resemble Siberian shaman's regalia attached to costumes (Larsen & Rainey 1948). 4) The Ipiutak ivory mask carvings show a strong influence in art design from China (Collins 1971). These exterior cultural elements manifest that Ipiutak culture possible had an Asian origin.



1



2

**Figure 95. Ivory harpoon heads from Ipiutak site.** 1. UAMN collection, 1941-7223, Type 1 harpoon head from Burial 74, 9.5 cm in length, photograph by Feng Qu. 2. Type 2 harpoon heads, drawing after Larsen & Rainey 1948: 71, Fig. 13.



1.



2, 3, 4

**Figure 96. Antler arrowheads from Burial 102, Ipiutak site. UAMN collection.**  
1. 1941-5738, 18.5 cm in length. 2. 1941-5746, 10.1 cm in length. 3. 1941-5745, 13.7 in length. 4. 1941-5744, 19.5 in length. Photograph by Feng Qu.

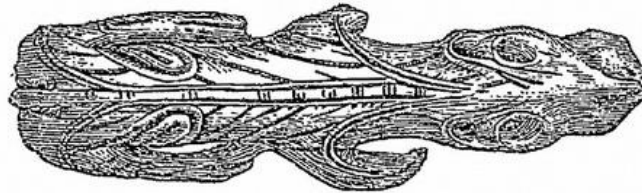
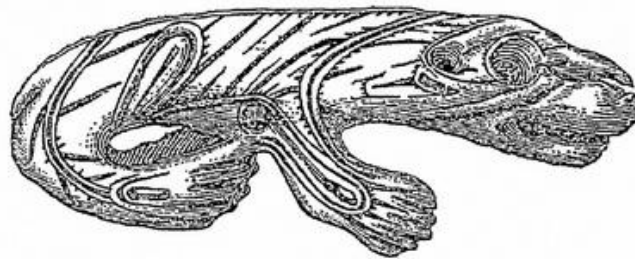


**Figure 97. Two engraved ivory plaques from Burial 61, Ipiutak site.** American Museum of Natural History (AMNH) collection, 60.1/7702 & 7703, 26.8 cm and 25.6 cm in length. After Mason 2009a: 116, Fig. 6.



**Figure 98. Ivory lance head from House 70, Ipiutak site.** UAMN collection. 9.5 cm length. Photograph by Feng Qu.





**Figure 99. Ivory walrus figure from Burial 42, Ipiutak site. AMNH 60.1/7914, 10.0 cm length. After Mason 2009b: 123, Fig. 14. Photograph by Feng Qu, drawing after Larsen & Rainey 1948: 125, Fig. 31.**



1



2



3

**Figure 100. Ivory objects of Ipiutak culture.** UAMN collection. 1. UA72-049-0001, Ivory rake, from Point Spencer, 26.4 cm length. Photograph by Brian Allen. 2. Ivory dagger (replica), Ipiutak site, 31.3 cm length, photograph by Feng Qu. 3. Ivory open work (replica), Ipiutak site, 18.8 cm length, photograph by Feng Qu.



**Figure 101. Ivory composite burial mask from Ipiutak site. AMNH 60.1/7713a-k, 38.0 cm height. After Mason 2009a: 117, Fig. 8.**

### Summary

Artistic materials in the prehistoric Bering Strait region exhibited various temporal and geographical variants. The strong Eskimo art tradition began to flourish during Okvik period and was inherited and developed by OBS culture, Punuk culture, and Thule culture. The major styles of prehistoric Eskimo art include various incised geometric forms, incised therianthropic images, animal-form carvings, and human figurines.

The Okvik engraving forms were mainly composed of straight or slightly curved lines. The prominent engraved figures included triangles, circle-dots, long slanting spurs, and realistic human eyes. Human figures were characterized by the stylized form of the pointed head and the face with a long straight nose and narrow pointed chin. The OBS engraving designs favored nucleated circles to resemble eyes and joints. The mask-like imagery was often decorated on ivory harpoon heads, counterweights, and other implements. Many hunting implements, such as socket pies and foreshafts, were carved in wolf-like or bear-like predatory forms. The Punuk line designs showed a formal and mechanical trend. All circles were made with a compass-like tool so that the circle-dot figures are perfectly round. The therianthropic imagery disappeared and was replaced by abstract eye motifs which might symbolize the mask-like faces. The predatory imagery also disappeared and more freestanding animal figurines were carved.

Although Birnirk culture was contemporary with Punuk culture, the Birnirk people produced few artworks. The art tradition in Thule culture varied by regions. The Thule culture in the Point Barrow region was directly developed from Birnirk culture. Like the preceding Birnirk culture, Thule artworks in this region were impressively scarce. However, Thule culture on the Kotzebue Sound and Norton Sound coasts, which received influence from Punuk culture, had rich artworks produced. The most impressive change is that few harpoon heads were incised and the geometric forms were mostly used to decorate the brow bands.

Ipiutak culture was contemporary with OBS culture. Although it had a strong art tradition like OBS culture, its unique characteristics were evident. The artistic designs on

the hunting implements were simple. The elaborate artworks were mainly related to burial rituals. Many styles, such as composite burial masks, open works, and incised daggers and plaques, imply that Ipiutak culture might have an Asian origin.









## **Chapter 4: Art Symbolism and Religious Practices in Ethnographic Records**

This chapter provides an ethnographic review of symbolism and religious practice among peoples in the Bering Strait region. The studied region covers coastal areas at the east and west side of the Bering Strait, basically including the Chukchi Peninsula, the Kamchatka Peninsula, northwestern, southwestern and southern Alaska, and the Aleutian chain. Based on the following reasons, the indigenous peoples I study in this paper not only include the Inupiaq Eskimo, the Yupi'k Eskimo, and Aleut, but also include the Chukchi and the Koryak in Northeastern Siberia.

First, according to Arutiunov and Sergeev, the ancient Paleo-Eskimo-Aleut culture of Kamchatka was gradually assimilated by the ancestors of today's Chukchi, Koryak, and Itel'men – the Paleo-Asiatic in the first millennium. The Paleo-Asiatic was believed to have absorbed cultural elements from the OBS culture. Chukchi and Koryak reindeer herding might have occurred in this period. In the sixteenth and seventeenth centuries, some Chukchi and Koryak groups moved to the coastal regions of Northeastern Siberia and became maritime groups by adapting the Eskimo sea mammal hunting technologies (Arutiunov & Sergeev 2006 [1975]: 198-206).

Second, the ethnographic literatures of the eighteenth and nineteenth centuries illustrated that the ethnic groups such as Chukchi and Eskimos who inhabited Northeastern Siberia and Alaska had many cultural similarities in clothing design, settlements, tools, weaponry, watercrafts, social organizations, languages, mythology, art, and spirituality (see Fitzhugh & Crowell 2009: 20). Fitzhugh (1994) generalizes some common features of material and spiritual cultures among the peoples in Northeastern Siberia and Alaska:

Others include plate and rod armor, the sinew-backed bow, wrist-guard, and sinew-twisters; snow goggles; semisubterranean log houses with roof entries; the use of ground slate, oil lamps, ulus, and skin boats; dog or reindeer traction; whaling by both float and poison techniques; mummification ritual; harpoon and fishing technology; spring traps; beliefs about similarly named evil spirits (kele, kala, kalag) and similar deities of the key and sea world; harvest festivals (whale, bladder, keretkun); specific features of the shamanism complex; and many more. (p. 33)

My ethnographic data about the Siberian side are mainly based on the ethnographic reports resulted from the Jesup North Pacific Expedition in the early 1900s, which include Bogoras's *The Chukchee* (1904-1909) and Jochelson's *The Koryak* (1908). The Jesup North Pacific Expedition was organized by the American Museum of Natural History, started in spring 1900, and organized by Franz Boas (1858-1942). Two Russian ethnographers, Waldemar G. Bogoras (1865-1936) and Waldemar Jochelson (1855-1937), were invited by Boas to join the expedition team. Geographically, it covers the North Pacific coast ranging from the Amur River, across Bering Strait, to Alaska and the American Northwest Coast. The native groups, which were investigated, include Eskimo, Aleut, and Indians in Alaska and British Columbia; and Koryak, Chukchi, and Yukaghir in Far East Russia. This pioneering expedition yielded valuable information which is related to the native economic, linguistic, history, religion, mythology, and folklore. The 12-volume series, *Memoirs of the American Museum of Natural History*, was edited by Boas. The ethnological studies on the native cultures of the Siberian Northeast through the twentieth century have been mainly built on the Jesup Expedition data provided by Jochelson's and Bogoras' works (Kuz'mina 1994).

Data on Alaskan Eskimo cultures are based on ethnographic reports which were published at the end of the nineteenth century and the beginning of the twentieth century. The most famous works are Edward Williams Nelson's *The Eskimo about Bering Strait* (1900) and John Murdoch's *Ethnological Results of the Point Barrow Expedition* (1892). The former work provides detailed descriptions of the writer's collections and

observations when he was living in northern Alaska for four years (Nelson 1900: 19). The latter is the report of the international Polar Expedition to Point Barrow, which “was organized in 1881 by the Chief Signal Officer of the Army, for the purpose of cooperating in the work of circumpolar observation proposed by the International Polar Conference” (Murdoch 1892: 19). My data is also from regional studies of Alaskan Eskimos in the twentieth century which include Lantis’ reports of the Nunivak Island Eskimos (1946), Gubser’s observations of the Nunamiut Caribou Eskimos (1965), Hawkes’ observations of the Yup’ik dance festivals at St. Michael (1913, 1914), Gidding’s document of Kobuk River People (1961), Birket-Smith’s reconstruction of Chugach Eskimo in the Southern Central Alaska (1953), Rainey’s field work on Tigara Eskimo village at Point Hope (1947), and Spencer’s ecological and social studies of the whale-hunting Point Barrow Eskimos (1959). In addition, Ann Fienup-Riordan has spent many years to record the Yup’ik elders’ explaining of the purposes and meanings of their tools, utensils, and artworks (Fienup-Riordan 1988, 1990, 1994, 1996, 2005, 2007). Her documents constitute one of major ethnographic sources in this study.

Fortunately, a large numbers of Eskimo artistic productions, which were collected in the first half of the twentieth century, are now housed in University of Alaska Museum of the North. I thus had the opportunity to examine the ethnographic collections. I have selected about 170 artifacts and have collected related information. These artifacts include engraved and carved ivory implements, painted wooden utensils, dancing masks, animal and human figures, and shamans’ various equipments.

This chapter is broken down into three sections. The first section focuses on daily-used materials, such as clothing, basketry, implements and utensils, which bear engravings and paintings, and artworks to depict human daily life. The second section reviews artworks used in ceremonies. The native mask art, as well as amulets and charms, are included in this section. The third section is centered on shamanic practices and related symbolism among indigenous peoples in the Bering Strait region. Early travelers and ethnographers in the nineteenth and early twentieth century witnessed that shamanism was evidently practiced by these peoples. The purpose of this chapter is to

observe how art symbolism resulted from their daily life, ceremonialism, and religious ideas and practices.

### **Art Symbolism and Daily Life**

Although indigenous peoples in the Bering Strait region had many cultural similarities in clothing design, settlements, tools, weaponry, watercrafts, social organizations, languages, mythology, art, and spiritual life (Fitzhugh & Crowell 2009: 20), the regional and ethnic variations in art and symbolism were much greater than the similarities. Even within a single ethnic group, culture and symbolism varied according to different environments and different life styles. For example, the Maritime Chukchi shared many cultural similarities with the maritime Koryak rather than with the reindeer-herding Chukchi who lived inland. Yup'ik and Inupiaq peoples are both considered part of the Eskimo ethnicity. However, the discrepancy in art styles between them is striking.

A sharp contrast can be seen by the decoration styles of the clothing. The Koryak and the Chukchi had more similarities in clothing art with the interior Siberian groups such as Even, Evenk, and Yukaghir. The clothing decoration was characterized by the complex geometric embroidery of Reindeer hair and beads. Among the Alaskan Eskimo and the Aleut, the clothing was usually decorated with simple color-dyed hair and painted skin strips (see Chaussonnet 1988; Fitzhugh 1994: 36-37). Koryak women were gifted seamstresses. Koryak garments used for daily life, festivals, and funerals were usually decorated with striking patterns. Jochelson (1908) and Fitzhugh (1988b) both agree that Koryak art received influence from the adjacent ethnic groups such as the Evenk, Even, and Amur peoples. An example demonstrates that some ornamental designs of the dress are copied from imported calico prints and other tissues. These designs were mostly presentations of geometric forms and plants. The lower borders of all coats, including fur coats and broderie coats, were well decorated with these distinctive patterns (Jochelson 1908: 685-707). Koryak women were also craftsmen to design decorative patterns of bags and baskets. It was common for the Koryak to insert colored warp-strands when

making grass and nettle-fiber bags and baskets. The insertion tassels were often dyed hair from young seal or crewel. Various geometric forms constituted the main motif on Koryak bags and baskets (708-712). Jochelson also found that Maritime Koryak women on Penshina Bay traditionally made rugs with reindeer skins. The principle motifs included geometric forms, conventionalized plants, and animals (712-723).

Comparatively, the Eskimo clothing had little geometric and totemic patterns when compared to the ornaments of Siberian peoples. The Eskimo clothing shows adaptations for the cold climate. The Eskimo garment was known by the name “parka,” which was usually made of caribou skin or Siberian reindeer skin (Oswalt 1967: 137-138). The other material for dressing included skins of wolves, wolverines, bears, seals, and walrus for men, and skins of fawns, hares, muskrats, marmots, and waterfowl for women. The men’s and women’s garments were generally in the same style in northwestern and southwestern Alaska. The trousers were made of a variety of animal skins such as the material for the frock. The hood rims and the lower edge of the skirts and sleeves were often trimmed with animal fur (Fitzhugh & Kaplan 1982: 137-143; Nelson 1900: 109-140). Among the Chugach Eskimo, many leather strips and animal hairs were attached to the garments but there were few geometric and representative decorations on them (Birket-Smith 1953: 64-66).

Aleut women were pronounced artists in sewing and weaving various articles. In his fieldwork report of the Aleut on the islands of the Unalaska District, which was published in 1840 in Russian, the Russian priest Ivan Veniaminov wrote: “All women, in general, can sew very well so that the best of them will not yield to the very best [professional] needlewomen. Every one of them knows how to weave a simple tserel or mat, an ishkat or a basket” (Veniaminov 1984: 287). Generally, the Aleut birch bark baskets and the basketry mats, bags, and baskets, were decorated with geometric designs. Painting decoration of parkas is best known in Aleut communities. The Aleut women also used techniques of hair embroidery to decorate clothing, ritual hats, and dancing shawls. Various geometric patterns dominated the Aleut fashions of clothing decoration (Black 2003: 146-173).

Decorative art on working tools and utensils differed in style and form between Inupiaq and Yup'ik peoples. The Inupiaq people of the eighteenth and nineteenth century, who lived north of Norton Sound in northwestern Alaska, were world-renowned for their pictographic engraving on ivory. Maritime Chukchi on Siberian coast were also such artists like their Inupiaq neighbor. Both Murdoch's and Nelson's collections show that many ivory and bone working tools such as drill bows and chisels were etched with images of figures, animals, birds, houses, hunting activities, and scenes. Arrowshaft straighteners, which were made of deer horn or walrus ivory, were usually shaped in animal forms such as deer and bear (Murdoch 1892: 176-190, Nelson 1900: 63-112). Among the collections of the International Polar Expedition to Point Barrow there were a few ivory engravings which only describe the hunting of whales and reindeer. The figures in the picture were colored with red ocher or black with soot (Murdoch 1892: 360-364). Murdoch feels that they "are nothing else than records of real or imaginary scenes" (361). According to Ray (1982:264), Nelson's collections also include some carved drill bows which represented festival and shamanic performance. Neither Murdoch nor Nelson interviewed any Eskimo informant to explain why the Inupiaq invested their energy to create this sort of pictographic art and what meanings the artworks carried. Ray proposes that most of these works "were not made for religious or ceremonial purposes" but might be only for artistic purpose (Ray 1982: 266).

UAMN specimen UA82-003-0061 (Figure 102) is an ivory snow knife bearing elaborate incising of hunting scenes. It was purchased by the museum from William Pedrick, said to be made around 1850. Both upper and lower rims have blades. The incising on one side depicts fifteen hunters in three boats harpooning six walruses, while seven caribou and four wolves are engraved on the other side. Such hunting scene and animal images are the common themes for the Inupiaq ivory pictographic art.

Yup'ik people in southwestern Alaska had different decorative styles. They not only incised on ivory implements, but also painted on wood utensils. Among Nelson's collection, there are a large numbers of wood dippers, spoons, ladles, dishes, and trays which were painted with therianthrope images. These food utensils were usually made by

men but used and owned by women. Some sea animals such as seals and whales, fish, hybrid animals, and mythological beings were painted in the inside of the bowl, usually in black color. Some handles of dishes and trays were carved in the form of human heads. Ivory handles for tool bags, tool boxes, and drill cords were often engraved or incised with the images of seal heads. A few bag handles were incised with hunting scores, whales, reindeer, and circles, and some incised patterns were colored with red ochre. Almost all wood tool boxes were painted (usually in black color) or engraved with images of animals, sea animals, mythical creatures, or humans (Nelson 1900: 63-112). The frequently appearing mythical beings included the worm-man, the burrowing mammoth, and the thunderbird. The worm-man was a monster named *palraiyuk*, who lives in lakes, marshes, and creeks. *Palraiyuk* killed men and animals (Fitzhugh & Kaplan 1982: 180-185).



**Figure 102. Ivory snow knife of Inupiaq culture.** UAMN collection. UA82-003-0061, 39.3 cm length. Photograph by Feng Qu.

UAMN specimen UA77-012-0005 (Figure 103-1) is a large wooden bowl collected from Nunivak Island by the donor. The inside painting in black color depicts a

seal harpooned with an attached float. Specimen 1-1933-9360 (Figure 103-2), also collected from Nunivak Island, has an inside painting of four creatures. Among the creatures one is a fish and the other three are possibly mythical creatures. It is worth noting that the seal in UA77-012-0005 and the fish and two mythical beings in 1-1933-9360 bear X-ray vision designs.



1



2

**Figure 103. Wooden bowls from Yup'ik culture.** UAMN collection. 1. UA77-012-0005, 47.4 cm length. 2. 1-1933-9360, 16.1 cm length. Photograph by Feng Qu.



The Yup'ik women's working tools on skins were made of ivory, bone, or antler, usually decorated with various geometric designs and animal or human images. Similar decorated artifacts were also collected from the Inupiaq people living in Northern Norton Sound. Nelson collected a great variety of women's small tools, including thimble guards, needle cases, boot-sole creasers, bag fasteners, bag handles, bodkins, and scrapers, most of which were engraved or carved with geometric form, animal or human forms, and images of mythological beings. Among geometric designs, concentric circles were also a common motif decorated on these tools. The animal images included seal, bear, fish, and others (Fitzhugh & Kaplan 1982: 130-136; Nelson 1900: 93-118). UAMN specimen UA75-080-0002 (Figure 104-1) is an ivory "housewife" (the Eskimo women's skin bag to store sewing implements) handle, collected from Teller, Seward Peninsula. It is decorated with a ladder-like design and a nucleated circle. UAMN specimen 1-1927-1794 (Figure 104-2), an ivory bag fastener collected from Togiak, southwestern Alaska in 1927, is incised with line designs.



1



2

**Figure 101. Eskimo ivory handle and fastener.** UAMN collections. 1. UA75-080-0002, housewife handle, 7.8 cm length. 2. 1-1927-1794, bag fastener, 12.1 cm length. Photograph by Feng Qu.

Comparatively, women's small tools among Eskimo people living in Northern regions of western Alaska had relatively few decorations. However, their needlecases were often carved in a human form. Both Eskimo men and women had a habit of using tobacco. Many ivory pipes and snuff tubes used by Inupiaq and Yup'ik peoples were ornamented with geometric patterns and the scenes of human every life (Nelson 1900: 273-285). UAMN specimen UA90-001-0022AD (Figure. 105) is an ivory smoking pipe collected before 1927. The whole body is decorated with concentric circles and stained with red and black pigment. An ivory polar bear head is attached to the front.



**Figure 105. Siberian Yupik ivory smoking pipe.** UAMN collection. Collected by Otto Geist in St. Lawrence Island, UA90-001-0022, 26.7 cm length. Photograph by Feng Qu.

The Danish author, Birket-Smith (1953) provided a detailed description of the Chugach Eskimo decorative art in his monograph *The Chugach Eskimo*. The report

contains information from the First Danish-American Alaska Expedition 1933, collections in the *Museum für Völkerkunde* in Berlin, and collections in the U. S. National Museum in Washington D. C. Chugach Eskimo's decorations were closely related to Yupik art. In Birket-Smith's descriptions, many household utensils such as wood boxes, spruce-root baskets, wooden dishes, wooden spoons and ladles, were decorated with geometric designs. The decorative techniques included weaving, carving, and painting (Birket-Smith 1953: 72-79). It is worthy to note that the basketry hat of spruce root, which were decorated with painted designs and shells, might represent one of most striking characteristics of the Alutiiq culture. Among Chugach Eskimo, they were worn in rainy weather (66-67).

Coastal Eskimos depended on sealing, whaling, and walrus hunting to obtain food, heating oil, gutskin for clothing, and hide for thong or boat covers. Pieces of hunting symbolism were prominent features of hunting implements among Yup'ik people. The old OBS hunting symbolism seemed to be maintained by Yup'ik, Aleut, and Alutiiq peoples (Fitzhugh 2009a: 187). Many Kayak paddles were painted and engraved with designs including geometric forms, human images, and female phallic emblems. Ivory spear guards for kayaks, cord attachers, float plugs, line fasteners, and drag handles were often carved in the form of various animals and human faces. The human faces on small ivory pieces such as cord attachers and float plugs had gender features which were usually marked by mouths. The smiling mouths represented male and frown mouth symbolized female. Socket pieces and foreshafts were made of ivory or bone and often carved with an animal image such as wolf or otter. Many ivory harpoon heads bore the double nucleated circles to resemble a beast's eyes (Fitzhugh & Kaplan 1982: 60-85; Nelson 1900: 135-152, 221-228). UAMN specimen UA67-013-0017A (Figure 106-1) is an ivory attacher in a seal form, and UA67-013-0017C (Figure 106-2) is an ivory attacher in form of a polar bear. UA67-013-0017D (Figure 106-3) is an ivory seal hook for linking the hide line. UA82-003-0057A and UA82-003-0057B (Figure 107) are a pair of Kayak stanchions engraved with a frowning female face and a smiling male face. They were used as hunting charms by Yup'ik sea hunters to protect them from evil spirits. UA64-

064-0027 (Figure 108-1) is a harpoon head and shaft of ivory held on with walrus line. The brass blade is still in the harpoon head. The three prongs to resemble a bird's tail and double circles to resemble a bear's eyes represented a typical Yupik symbolic style of harpoon heads. Another harpoon head (UA64-021-0283, Figure 108-2) has same form as UA64-064-0027, but its concentric circles are attached with several cross lines, recalling the sharp spur design in Okvik culture.



1



2



3

**Figure 106. Eskimo ivory cord attacher and hook.** UAMN collection. 1. UA67-013-0017A, leather cord with seal attacher, length of seal 6.2cm. 2. UA67-013-0017C, leather cord with polar bear attacher, length of polar bear 5.8 cm. 3. UA67-013-0017D, leather cord with seal hook, length of seal 2.7 cm. Photograph by Feng Qu.



**Figure 107. Kayak stanchions.** UAMN collection. UA82-003-0057AB, from Chevak, length of A 16.5 cm, B 16 cm. Photograph by Feng Qu.



1



2

**Figure 108. Harpoon head and shaft of ivory.** UAMN collection. 1. UA64-064-0027, length of harpoon head and point 6.6 cm. Length of shaft 6.6 cm. 2. UA64-021-0283, length of harpoon head and point 7.8 cm. Length of shaft 8.2 cm. Photograph by Feng Qu.

Among the Yup'ik, the Alutiiq, and the Aleut peoples, prominent hunting gears with magical and animal symbolism also included hunting hats. These wooden hats usually included two styles: the conical helmets with closed crowns and the visors with open crowns. According to Nelson and Veniaminov, hunting hats were used specifically to protect the eyes from the sunlight and sea water spray (Nelson 1900: 167; Veniaminov 1984: 269). However, Black contends that the practical use of the hats is uncertain (Black 2003: 127). The wooden hats might be not only used in sea hunting, but were also worn in ceremonial activities. The decorations, which were characterized by paintings and ivory effigies, were very complex and seemed to highly emphasize symbolic significance. The different decorations might refer to the different social status of the owner, and, according to Black, they might also symbolize the political units (128). Some closed-crown hats and open-crown visors were painted and incised with stylized anthropomorphic or zoomorphic images and representational scene, while others were ornamented with bone and ivory figurines in both human and animal form. The thunderbird, falcon, and hawk were usual motifs on the Aleut hunting hats. A whale-man transformation image was collected from Unalaska (Black 1991: 30-42). Black is inclined to conclude that "the function of these figurines can be deduced as representing spirit protectors of the hunter" and can provide "supernatural force" to help "the hunters to attain success" (42). The geometric forms in the hat decorations were characterized by spirals, rosettes, parallel bands, curves, concentric circles, and so forth. For instance, one standard ivory decoration were two sidepieces attached to the two sides of the hat, it was called *volute*s by Black. The rounded top end of the volutes was often carved into spiral patterns (Black 2003: 130-131). A comparative study between the wooden hats and the Eskimo masks leads Ivanov to conclude that the wooden hats originated from masks "of a religious and magic character" (Ivanov 1991: 126). He further points out, the original purpose to wear the mask or the hunting hat was to create an intimate relationship between the hunters and animals. The hats, as in the case of the ritual masks, had a ritual significance and reflect the inspirations of the shamans (127).



UAMN specimen 0361-0001 (Figure 109) is a wooden hunting helmet originally from Nash Harbor, Nunivak Island. An ivory walrus, flanked by two ivory bird heads, is ornamented on the front of the hat. The eyes of both the walrus and the two birds are indicated with nucleated circles. Two ivory pendants are placed to either side of the hat and they are also ornamented with circle-dot motif.



**Figure 109. Yup'ik hunting hat.** UAMN collection. 0361-0001, from Nunivak Island, 28 cm height. Photograph by Feng Qu.

Children's toys were found among all peoples in the Bering Strait region. The dolls for Eskimo girls as toys were usually made of wood, ivory, bone, or clay. They were humans in both genders (Murdoch 1892: 380-383, Nelson 1900: 342-347). However, the dolls for Chukchi and Koryak girls were made of cloth and animal fur (Bogoras 1904-1909: 276; Jochelson 1908: 647). Eskimo children's toys also included small figurines of birds, seals, dogs, bears, and so on, which were carved by their fathers

in ivory, bone, or wood. Yupik girls usually had an ivory “story knife.” The little girls used these special knives to illustrate in the mud or the snow while they were telling stories to one another (Fitzhugh & Kaplan 1982: 156-159). Once in a village besides the Yukon mouth, Nelson saw several children illustrating animal figures in snow (Nelson 1900: 346). Among Nelson’s collections, most story knives were carved and etched with animal images and geometric patterns. The principal decorative motives were still like the traditional prehistoric cultures in the Bering Strait region, including circle-dot, Y figure, line with ticked marks, spurred lines, and other motifs (Fitzhugh & Kaplan 1982: 156-159; Nelson 1900: 345-346).

UAMN specimen 0638-6042 (Figure 110-1) is an ivory story knife collected from South Alaska between 1920 and 1930. It bears a complicated design composed of a ladder-like motif, converging lines, long lines with ticked marks, and a nucleated circle with spurred lines. UA67-098-0048 (Figure 110-2) is also an ivory story knife collected from Southwest Alaska before 1965. The series of small circle-dot figures with sharp spurs resembles the circle-dot motif of Okvik culture. UA70-002-0010 (Figure 110-3), a larger ivory knife with a length of 29 cm, has decorative incisions on both sides. A long single line with ticked marks traces the top edge. Converging ladder designs and a single X figure are also ornamented.

Generally, the decorative and carving art in the Bering Strait region was used for both secular and religious purposes. The clothing and basketry were usually considered women’s art in most parts of the world. As Chaussonnet has stressed, “Women as seamstresses played an extremely important role in the expression of cultural values and meaning” (Chaussonnet 1988: 209). The conventionalized clothing designs of Koryak and the trimming tradition of the Eskimo seemed to be more decorative than representative and totemic, thus they seemed to serve an aesthetic purpose in the human daily life.

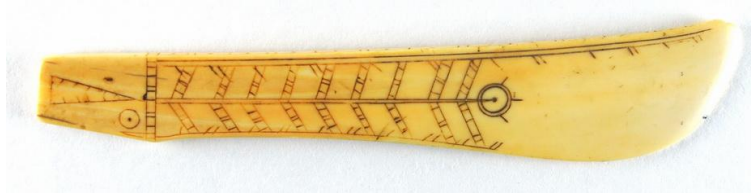
The pictographic artworks of the Inupiaq tastefully described the Eskimo’s hunting activities, ceremonial celebrations, and other daily activities on the walrus tusks, and working tools such as the drill bow, the bag handle, the arrow-shaft straightener, and



the snow shovel (Murdoch 1892: 177-178, 360-364; Nelson 1900: 84-85). They were most likely created to record the year-round activities and to function as a semiotic system. The Koryak and the Aleut usually used carvings to express the same realistic themes. These sculptures of the Koryak and the Aleut were descriptions of men, birds, fish, and animals in various postures, and their daily life. The sculptures in Kamchatka were made by Maritime Koryak but few by the reindeer herders. The materials included wood, the antler of reindeer, the horn of mountain-sheep, bone of whale, teeth of the white whale, walrus-tusks, and mammoth-ivory. The works were characterized by small sizes and by the motifs of men, birds, fish, and animals, captains of whaling vessels, men and reindeer, and women and children. The themes about daily life involved wrestling, beating drums, hunting, drilling of fires, driving dog-sledges, etc. Some tools such as spoons, snow-beaters, awls, and pipes, were also carvings in the forms of men or animals (Jochelson 1908: 646-669). A group of Aleut ivory carvings, collected in the first half of the nineteenth century, represented male and female dancers. The Aleut, like Eskimos, were fond of ivory material for carvings. Daily life such as hunting, fishing, butchering, and dining were vividly depicted. The zoomorphic ivory sculptures represented naturalistic postures of otters, seals, and birds (Black 2003:100-117). Jochelson considers that these realistic carvings are different from those figures of idols and amulets with religious meanings. So he speculates that they are more likely to meet the aesthetic need of man (Jochelson 1908: 657).

In contrast, another group of artworks apparently bear religious ideas. The Yupik paintings on the wooden utensils usually represented mythical beings (Nelson 1900: 73-63, 93-100). Nelson had detailed comments about the mythical creatures in terms of Yupik mythology. The frequently represented mythical beings were the worm-man, *Palraiyuk* (a mythical monster living in water or wetland), *Ko-gukh-pûk* (a burrowing mammoth), the thunderbird. These creatures were also engraved on some ivory implements such as the bodkin and the harpoon rest. *Palraiyuk* was often painted on kayaks and umiaks, or some masks. Fitzhugh considers that this creature may be influenced from the dragon images in Chinese mythology (Fitzhugh & Kaplan 1982: 120-

123, 172-185). The animal images attached to the hunting gears of the Eskimos, such as spears, boats, and hunting hats, were amulets and charms to ensure the success of the hunt.



1



2



3.

**Figure 110. Eskimo girls' ivory story knives.** UAMN collection. 1. 0638-6042, from Southwest Alaska, 17.6 cm length. 2. UA67-098-0048, from Southwest Alaska, 23.5 cm length. 3. UA70-002-0010, from undetermined place in Alaska, 29 cm length. Photograph by Feng Qu.

### Art Symbolism and Ceremonialism

Ceremonies among the Chukchi, Koryak, Eskimo, and Aleut in the Bering Strait region usually had a yearly cycle. For the peoples living on coastal areas, most important ceremonies were often related to the sea mammal hunting activities.

Sacrifice to the Sea, Fall Ceremonial, Ceremonial of *Keretkun*, Exchange of Presents, and Trading Dance were most common ceremonies for Maritime Chukchi. A dog was often slaughtered in the Sacrifice to the Sea, whereas the dancing of family members and the shamans' performance were the major programs in the Fall Ceremonial held in order to give thanks to the spirits. The Ceremonial of *Kere'tkun* usually lasted two, three, or five days, and was considered the most important and complicated ceremony in the Coastal Chukchi custom (Bogoras 1904-1909: 385-401). In the Chukchi mythology, "kere'tkun" was the master of the sea, who was "a tall anthropomorphic character with a black face and a bad temper" (Serov 1988: 254). The performance of the Kere'tkun ceremonial usually lasted three days. During the days of the ceremony, all family members dressed in light overcoats made of seal-guts, and the master and mistress of the family needed to wear special head-gear. A net was set up in the center of the house, suspended under the vent hole. The striking feature of the net was that some images of wooden birds and small toy-sized wooden paddles were suspended with the net. The paddles were painted with seal-blood, and the paintings usually represent hunting scenes or sea games. A small carved wooden figure represented Kere'tkun, and was placed on a lamp (Bogoras 1904-1909: 392-399). The net ritual was also conducted by Asiatic Eskimo in the Eider-duck Ceremonial. A net was supported by a pole and wooden images of eider-ducks were tied to separate lines of leather. During the festival, people also used a whistle to symbolize the sound of the eider-ducks' voice (Bogoras 1904-1909: 401-402).

For the Maritime Koryak, the most important festivals were the Whale Festival, the Putting-away of the Skin Boat for the Winter, and the Launching of the Skin Boat. The Whale Festival is the most important communal ceremony for the Coastal Koryak.

All villagers were invited to participate. It usually occurs in October, and after the capture of a whale and lasts a few days. During the ceremonial days, the villagers danced while dressing in specific dancing-costume and wearing masks, offered a sacrificial dog to the master of the sea, enjoyed delicious food, including whale meat, in the house, had divination activities, and fed the whale spirit represented by a wooden whale image (Jochelson 1908: 65-77). Jochelson (1908) provides a vivid description of the open of the festival:

When the women of a certain house discover their boats towing a whale, they put on their embroidered dancing-coats, trousers, and shoes, and masks of sedge-grass, take sacrificial alder-branches and firebrands from the hearth, and go to the beach to meet the whale. (p. 67)

The Putting-Away of the Skin Boat for the Winter was a family celebration for the close of the hunting season. It resembled Reindeer Koryak's ceremony on the return of the herd from summer pastures. In this festival, the old fire was taken outside the house to let it die out naturally and a new fire was built on the hearth. The Launching of the Skin Boat was held to celebrate a new hunting season in every spring (Jochelson 1908: 78-79). The human-face masks were used in some ceremonies such as the whale festival, but they were most often worn by the Maritime Koryak during the first winter month. Most of them were made of wood. Jochelson considers that "Their use is partly for religious purposes, partly for amusement, the celebration being a kind of masquerade" (80).

Both the Chukchi and Koryak peoples, including inland herders and coastal sea hunters, had special ritual and ceremonies to give respect to fire. Among herding Chukchi, Sacrifice to the Fire was a ceremony which was employed on the journey from the winter pastures to the summer locations. A small fire was lit before the tent entrance at every evening. For the Reindeer Chukchi people, the slaughtered reindeers were considered as sacrifice to the spiritual world. In addition to genuine animals and living goods such as various food, tobacco, and alcohol, they also offered substitutes of animals and food,

such as reindeer images made of leaves and wooden images of a sausage, to the spirits. The toy-like wooden bowl, bow, and arrow were also used as sacrifices (Bogoras 1904-1909: 368-378).

The hearth was among the most sacred things in every Chukchi and Koryak household. For Chukchi, the fire place not only needed a fire keeper, who was usually a woman, but also wooden fire-tools. The most common fire-tool was a fire board, which was a wooden board roughly carved into a human form. Usually the human figure only had head and shoulders but without arms. Sometimes legs were carved. The facial features such as the eyes, nose, and mouth were indicated. At a ceremony the figure was fed with grease or marrow to its mouth. For the Reindeer Chukchi, the hearth was directly connected with the herd. At a ceremony in the fall, people set up a large sacred fire in the open space and drove the herd to the fire because they believed that the sacred fire can impel the evils. Every family had several fire-boards, and each served different functions. The most ancient one, which might be inherited from ancestors, was regarded as the protector of the herd. Second was a protector for hunting, and the third was to protect sacrifices. The superfluous and too old fireboards were often destroyed in the spring, usually at the ceremonial of the antler. The abandoned human figure was burned in the fire, and sometimes its head was cut off and put with some charms together as family guardians (Bogoras 1904-1909: 349-353).

In much the same way as Chukchi culture, the fire-board was regarded by Koryak as the deity of the household fire which guarded the family hearth. The fire-making implements, including fire-board, bow, wooden drill, and stone head-piece, were treated as household guardians among the Koryak. The sacred arrow, which was offered after a wolf had been killed, was seen as the guardian of the hearth. The divining stone was also associated with the fireplace. It was put in a dewed bag and was only used in ceremonials. The fire-board figure among Maritime Koryak was the protector of sea mammal hunting while that among Reindeer Koryak was the protector of the herd. The fire deity among Reindeer Koryak was also assisted by other sacred implements such as a lasso, a watch-dog, a sacrificial ladle, a wolf figure, and other wooden figures to serve as the protectors

of the herd (Jochelson 1908: 33-36). Fire-board had a central importance in Maritime Koryak's family spring festival, "The Launching of the Skin Boat." During the ceremony, people used the fire-board to light up a sacrificial fire, and threw pieces of seal-fat in the fire as a sacrifice to the boat. The mouth of the wooden figure was greased with fat. People also used knife to clean the figure's eyes, and spoke to it, "Well, your eyes have become clear, the sea is open, look out" (Jochelson 1908: 79).

Eskimo ceremonies included the Boat Launching Ceremony, the Bladder Festival, the Doll Festival, the Whale Feast, the Messenger Feast, the Asking Feast, and so on (38-81). The Boat Launching Ceremony symbolized the initiation of the sea mammals in the year cycle. In Lantis' comment, "Everywhere in Eskimo Alaska that whaling was carried on, there were ceremonies at the opening of the season" (Lantis 1947: 38). Although Maritime Koryak also had the spring festival "Launching of Skin Boat" to open the hunting season, the Eskimo one had different performances and actions during the festival. The boat-launching ceremony was held everywhere on the Alaskan coastal regions. On Nunivak Island, the performances included the recitation of myths by elders, food offering to the kayak, kayak cleaning, and singing. New paddles were made and painted with totemic designs. In Cape Prince of Wales, the principle performance elements and ritual actions of the Boat Launching ceremony included "proprietary hunting songs sung before the launching," "new clothing and completely renovated boat and gear," "boat and implements purified with smoke," and "boys and girls scrambling for food which a woman throw to them" (Lantis 1947: 38-42).

Many Eskimo ceremonies were held in the *qasgiq*<sup>11</sup>, a large communal house which was used by men and boys or for community gatherings. Therefore, it was also called "men's house." According to the archaeological record, the *qasgiq* first occurred in the Punuk period (Bondi & Blumer 2002). In Fitzhugh and Kaplan's (1982) description:

The *qasgiq* is a central place in the lives of the men. They eat, sleep, and make gear for hunting, fishing, and warfare here. They also take sweat baths, tell stories, and

---

<sup>11</sup> *Qasgiq* is the central Yupik name for the men's house.

play games in the *qasgiq*. The structure itself has a single window with a removable gutskin covering at the top, and a large deep fire pit in the center of the floor that is kept covered when it is not in use. The entrance is through a passage door leading to an anteroom at the front wall in summer, but in winter that door is sealed off, and people enter and exit through a passage leading from the bottom of the fire pit, under the floor, to the anteroom. This passage serves to preserve warmth inside, and it also is necessary as a flue to ventilate fires in the fire pit. Along the side and black walls are platforms or benches, and each man has his own place. Elderly men of great status occupy the choice places beside the lamp in the back corner, while those of lesser standing are closer to the drafty entrance. (p. 162)

The ceremonies held in the *qasgiq* included the Bladder Festival, in which the bladders of seals killed during the year were honored because the Eskimos believed that the animals' souls were contained in the bladders. This celebration was usually held at the time of winter solstice and lasted a few days (Fienup-Riordan 1988: 267; Nelson 1900: 392). All bladders were from the killed animals and were preserved by hunters throughout the year. During the Bladder Festival, these bladders were inflated and hung in the men's house. At the close of the festival, the bladders with bunches of wild celery were taken by young men to the sea through a hole in the ice. This ritual action symbolized the animal's reincarnation. The souls, or shades of animals, were supposed to enter the bodies of unborn animals so that the hunters were able to have successful hunting in the following year (Fienup-Riordan 1988: 267-268; Fitzhugh & Kaplan 1982: 206-210; Hawkes 1914: 26-28; Lantis 1947: 53-60). The popularity of the Bladder Festival among Eskimos was essentially based on their firm belief of the animal's reincarnation. As Nelson (1900) has documented:

Several of the St Michael Eskimos told me that they knew this reincarnation to be true, as a man living at a village on the outer side of the island killed a seal a few years ago which had the same mark on its bladder that he had put on the bladders at

the festival the previous year. It should be noted that each hunter puts his totem mark or other personal sign in red or black paint upon his bladders so that they may be distinguished from those of other hunters. The aromatic smoke and red flames of the resinous stalks of the wild parsnip are thought to be very pleasing to the shades of the animals whose bladders are treated with them, and at the same time the flame drives away any uncleanness and unfavorable influence that may be present. (p. 393)

During the festival, the souls of animals were respected and entertained by human performances and ritual actions. Nelson offered meticulous descriptions of the feast at St. Michael, the villages near Cape Vancouver, and villages near the Yukon (1900: 379-393), and Lantis also recorded the procedure of the ceremony on Nunivak Island (1946: 182-187). All the men, women, and children of an Eskimo village, as well as invited guests from other villages, gathered and participated in the celebration. The bladders from killed seals, walrus, whales, and bears were brought in the men's room by the hunters and hung up on the back wall, tied with a bunch of seal and walrus harpoons. Hunting hats and visors were then arranged beneath the bladders and harpoons. Large models of kayak paddles were hung from the skylight and at the last day the paddle models were carved into small models to be attached to the bladders. A bundle of wild celery stalks were attached with a standing pole in the men's house or somewhere else. Finally the wild celery stalks were burnt and the smoke is supposed to purify the bladders and the room. At the first day, women made new clothing and men made new dishes for their use in the succeeding days. Men also carved wood to make animal images. Offerings of food and water were given to the animals' souls. Men and boys also took a sweat bath. Dancing, singing, and drumming were performed every evening, and sometimes through whole night. According to Fitzhugh and Kaplan (1982: 207), bird effigies were used in the festival and hung in the men's house. In Kushunuk village near Cape Vancouver, Nelson saw "a fantastic bird-shape image, said to represent a sea gull," hanging from the roof (Nelson 1900: 382). On Nunivak Island, the masks in this festival were made of bird and animal skins or are very simple wooden masks, unlike those used in the Messenger Feast,



which were elaborately carved (Lantis 1946: 192). The shaman played a leading role in the ceremony, directing all the rituals and rites. In Kushunuk, Nelson witnessed a morning ritual of the Bladder Festival. The shaman lighted a wild celery stalk torch and passed it to each of the dancers in order to purify the room and the dancers and to protect hunters from evil influence. After that the shaman took a selected twelve-years old boy and laid him across the entrance hole. Bladders were taken off from the walls by hunters. The shaman then stood on the roof, and hunters passed the fastened bladders and celery stalks to the shaman through the smoke hole. When the chief shaman lighted the celery stalks, the hunters held their bladders, as they were led by the shaman on a run toward the sea. When arriving on the ice, the hunters thrust the bladders under the water through a hole in the ice made previously (Nelson 1900: 388).

The shaman was also an organizer of the Doll Festival which is held to ensure the successful hunting in the coming year. The doll was used to divine the hunting success, and only shamans and old men knew the place where the doll is preserved (Lantis 1947: 65). According to Nelson's observations of the Eskimo of the lower Yukon, this ceremony was "characterized by the placing of a wooden doll of image of a human being in the kashim and making it the center of various ceremonies, after which it is wrapped in birch-bark and hung in a tree in some retired spot until the following year" (Nelson 1900: 494). During the year, the shamans needed to consult this human doll to ensure the success of the season's hunting or fishing (494).

The Messenger Feast was also a hunting festival and was characterized by the masked performance and gifts exchange between hosts and guests. It "derived its name from the fact that the host community sent messengers to the guest community with an invitation to the event" (Oswalt 1967: 226). During the festival, "a host village presented its guests with a long list of wants, and the guests subsequently reciprocated with a list of their own" (Fienup-Riordan 1988: 269). In the hosting village, "The life-like performances depicting the habits of animals and scenes of hunting and warfare were given by masked dancers to please the spirits" (Lantis 1947: 67). On Nunivak Island, in Lantis' documentation, host males brought large wooden frames into the men's house,

and each frame contained wooden carvings of seals, caribous, birds, kayaks and kayak men, as well as other objects. These figures displayed ancestors' hunting achievements to the guests. Models of harpoons and arrows stuck to the animals, and every figure represents a hunting story (Lantis 1946: 191-192).

Mask dancing played a major part in the ceremony of the Messenger Feast. The male dancers sang the same song and danced in the same style, although they wore different masks. All masks were beautifully carved and painted. These masks contrasted significantly with the very simple wooden masks used in the Bladder Festival. These masks were carved by the men of the village under the instruction of the shaman before the festival. The masks were not related to the personal experience of a dancer, but represented mythological beings such as the Big-eagle with half human face and half animal face, or represented the shaman's spiritual visions. All songs were spirit songs which were said to be from the spirits and were learned from the shaman. A sweat bath was held after the dances to mark the end of the ceremony. The masks were destroyed; they were broken or put in the sweat bath fire. All wooden figures were given to the children as amulets (Lantis 1946: 192).

In addition to the above mentioned feasts, a mask festival among Yup'ik groups in the southwestern Alaska, known as the Inviting-in Feast and held in January or February each year, was reported by Nelson (1900: 358-359) and Hawkes (1913). As a witness, Hawkes has learned that the feast was "a thanksgiving for abundance of fish and game," and that the masks actually represented "the various spirits (*inua*), and figures of animals which correspond to them" (Hawkes 1913: 19). Although both the Bladder Festival and the Inviting-in Feast were to give respect to animal spirits, the difference between them is evident. The former was held to appease the spirits of animals already slain in the past hunting activities, but the latter was for pleasing the animals' spirits who help hunting success in future as hunters' guardians (1). According to Nelson, the masks were made by the shamans to represent the faces of the shaman's supernatural or semi-human familiars (1900: 358). The animal or semi-human faces were "to propitiate and do honor to the animals or beings" represented by the masks, "and thus bring about plenty of

game during the coming year and to ward off evil influences” (359). The souls of animals were supposed to be present with the dancers and got pleasure and honor from the performances and the offerings of food and drink (359). However, according to Hawkes’ observation at St. Michael, the masks used in the Inviting-in Feast had two types. The first type was a mask\s which was intended to amuse guests and was used mainly in the comic dances on the first day of the ceremony. The masks were usually made with one higher cheek than the other and twisted eyebrows, eyes, and mouth. The second type was the mask which represented animal spirits and was used in the totem dances on the third day (Hawkes 1913: 12-17). The actors’ paraphernalia also included armlets, finger masks, and fillets. The finger masks were miniature masks worn on fingers by the women. They usually bore an animal image and were ornamented with plentiful feathers. The armlets and fillets, made of fur or feathers, also represented animal spirits like those totemic masks (Hawkes 1913: 12). At the end of the ceremony, all masks were burned in the fire (Nelson 1900: 359).

The Whale Feast was an important ceremony, especially in Point Hope. A four-day Whaling Feast, held in two men’s houses at Tigara village, was witnessed by Rainey in 1941 (1947: 245-253). The ceremony was directed by *umeliks* (whaling captain) and the shaman. During the festival, a group of sacred objects, called *qologogoloqs*, including masks, boat models, and animal figures, were hung up from the ceiling of the men’s houses. These objects represented stories and legends about ancestors and the famous events happened in the past. The most important objects were a wooden whale, two small model umiaks with crews and hunting gears, and a bird. Another group of objects were called *pogok*, which included images of seals, polar bears, caribou, whales, walrus, birds, mythical animals, and human. All of these figures were made of wood. It is supposed that men and boys would become proficient hunters by carving these images. These *pogoks* were also suspended from the ceiling of the men’s house. The difference between *qologogoloqs* and *pogok* is that the former group of images was kept permanently while the latter group of objects was burned at a special place at the conclusion of the ceremony.

The *umeliks* also used pigments to paint a picture on the beam of the house. The drawing depicted the scenes of whale hunting. Mask dancing, singing, and drum beating were performed through the whole ceremony. This Whale Feast included elements of the Bladder Festival of the southern Eskimo. As hunting achievement, the whale bladders were hung in each communal house permanently. One of the bladders was inflated during the ceremony each year, and was dragged through a stuffed marmot from one corner to the other.

There were also some minor hunting and fishing rites among Alaskan Eskimos such as fishing ceremony, the bear cult, the fox cult, the wolf cult, the whale cult, the seal cult, and so on (Lantis 1947: 42-51). Rites for building, the sun, the moon, and the weather were also held (Lantis 1947: 33-38). According to Oswalt, various rituals, rites, and ceremonials expressed the human relationship with the supernatural forces (1967: 225). The rite for building was a usual celebration for the building of *Kashim* or *qasgiq*. The rites for the sun, the moon, and the weather involved the Eskimo mythology in which the deities of the sun and the moon were worshiped (Lantis 1947: 33-38).

Memorial feasts to honor the dead were held by most Eskimo groups in Alaska and Chukotka. A minor memorial feast occurred once, twice, or three times each year, but a great feast to the dead was conducted after several years (varies from four to ten years among different tribes) (Oswalt 1967: 227-229). The purpose of the great feast to the dead was “to free the souls of the deceased from the earth forever” (228).

The regional variations of Eskimo ceremonialism were prominent. From Seward Peninsula to Kodiak Island a rich ceremonialism could be found everywhere. Inupiaq people in the Point Hope area resembled Yup'ik in the south and had rich ceremonial tradition with local elaboration (Lantis 1947: 113-116). Rainey's field report of Tigara Eskimo in Point Hope shows that the Tigara villagers held a whaling Ceremony at fall each year, which was called *Yowak* meaning “the sitting.” The ceremony included whale bladder ritual as the Bladder Feast held by Yup'ik (Rainey 1947: 245-253). However, although people in Point Barrow did have celebrations in December and June after the whaling season, and mask dancing, singing, and drumming were represented to show

hunting scenes, ceremonies such as the Bladder Festival and Great Feast of the Dead are absent, and their carved masks and other paraphernalia were very simple (Lantis 1947: 68-69, 114-115).

One of my major concerns in this research is the art symbolism used in the native ceremonialism. This investigation is supposed potentially to help interpret the art symbolism carried by the artifacts found from the archaeological sites in the Bering Strait region. Based on above observations, a list of artworks used by the indigenous peoples in ceremonials is illustrated in the Table 1.

**Table 1. Indigenous festivals in the Bering Strait region**

Festivals	Ethnicity	Ceremonial objects	Performances & actions
Ceremonial of <i>Kere'tkun</i>	Maritime Chukchi	Wooden birds, painted paddle models, human figure representing Kere'tkun, net, special head gear	Dog sacrifice, dancing, shamanic performance
Fall Slaughtering	Reindeer Chukchi	Fire-board in human form fire drills, family charms	Reindeer slaughtering, fire burning, drum beating, shamanic performance
Whale Festival	Maritime Koryak	Masks, dancing costume, wooden whale	Dog sacrifice, divination,
Launching of Skin Boat	Maritime Koryak	Fire-board in human form, seal-skin	Fire burning
Eider-Duck Ceremonial	Asiatic Eskimo	Wooden sea gulls, wooden eider-ducks, net, long pole with	whistling

		paintings, whistles	
Boat Launching Ceremony	Alaskan Eskimo	Kayak, hunting gear, hunting amulets, paddle with paintings, hunting hats,	Singing, myth-telling, food offering, boat-cleaning, paddle-making and painting,
Bladder Festival	Yup'ik	Bladders of sea mammals, harpoons, hunting hats, paddles, wooden animals, bird effigies, masks	Sweat bathing, burning of wild celery, singing, dancing, drum beating, shamanic performance, food & water offering
Doll Festival	Yup'ik	doll	Shamanic divination
Messenger Feast	Yup'ik	Wooden frames, wooden animal figures, kayak models, harpoon models	Mask dancing, gifts exchange, life-like performance, singing, drum beating, sweat bathing, burning of props
Inviting-in Feast	Yup'ik	Masks, armlets, finger masks, fillets	Mask dancing, singing, drum beating, shamanic performance, burning of props
Whaling Feast	Inupiaq	Masks, wooden animal figures, human figures, painted beam, boat models, whale bladders, stuffed marmot	Game play, storytelling, mask dancing, singing, drum beating, shamanic performance, burning of props

Sources: Bogoras 1904-1909; Fienup-Riordan 1988; Fitzhugh & Kaplan 1982; Hawkes 1913, 1914; Jochelson 1908; Lantis 1946, 1947; Nelson 1900; Oswalt 1967; Rainey 1947

Masks played a significant role in ceremonies in the Bering Strait region, especially among the Eskimo cultures. However, Chukchi seemed to be an exception. Unlike Koryak and Eskimo peoples, Chukchi did not have wooden masks but made reindeer-skin masks, which were called “hairy face.” Bogoras is uncertain the function of the hairy masks in the Chukchi ceremonies (1904-1909: 349-367). Most of Koryak masks were made of wood, usually representing human images, and were most often worn by the Maritime Koryak during the first winter month. Jochelson considers that “Their use is partly for religious purposes, partly for amusement, the celebration being a kind of masquerade” (1908: 80).

The painted face masks were the most striking Eskimo ceremonial object, usually made of spruce wood (Oswalt 1967: 229). As Dorothy Ray has commented, “Eskimo masks of Nineteenth century Alaska exhibit one of the broadest imaginative vistas in primitive art. They range from simple facial forms to surrealistic creations, and from delicate objects that covered only the eyes and nose to huge slabs of wood that shielded the entire body” (1967:1).

Eskimo masks were used for secular or religious purposes (Fienup-Riordan 1996: 59-60; Lantis 1947: 90-93; Ray 1967: 29-45). Usually the religious masks were carved by the shaman or carved by laymen but in the shaman’s direction. The secular masks, however, whether with animal face or human face, were carved by any person and worn by laymen. The masks that were collected in the International Polar Expedition to Point Barrow were documented by Murdoch (1892: 366-370). Most of these masks have human features and are all masculine. Only one represents a wolf’s face. Although all of them were used by dancers, Murdoch does not clarify if they were associated with religious and supernatural expressions. According to his exploration of the Eskimo of Point Barrow in 1950s,<sup>12</sup> Spencer states that the supernatural elements were not developed in the dance masks (1959: 293-294). In Hawkes’ report of the Eskimo dance in the southwestern coast, many masks were worn in the social dances for public

---

<sup>12</sup> Oswalt notes that the Eskimo in Point Barrow whom Spencer visited may differ from those at Murdoch’s time. They may be the inland Eskimos who migrated from the interior river valleys (Oswalt 1967: 234-235).

amusement (1914). Even if in a religious ceremony, not all masks were made for spiritual purposes. In the Inviting-in Feast at St. Michael, which was celebrated by Eskimos in order to honor animals' spirits for future hunting success, Hawkes found that the comic dances with dance masks were only performed to make humor and amusement. The religious dances with spiritual masks to honor animals were performed on the third day (Hawkes 1913). These secular masks might represent images of birds and animals or human beings. However, Ray's field surveys also illustrate that some masks had dual purposes: they were sometimes used in comic dances and sometimes in spiritual dances (Ray 1967: 46).

Many Eskimo masks were actually carved to depict a folk story which was performed by dancers in a ceremony. UAMN specimen UA 64-007-0019 (Figure 111), a caribou mask collected from Old Hamilton in 1934, represents a story about a Yup'ik woman's caribou child. This story has been luckily collected by Ann Fienup-Riordan: "A young woman went out to get some wood. Soon she became tired and fell asleep. Upon waking from her sleep she felt a great change in her life. Later on she discovered she was to have a child. When the time came she gave birth to a caribou. When the caribou was old enough, his mother sent him away from home to go and search for his own kind. Finally he discovered a large band of caribou and he joined the herd" (Fienup-Riordan 1996: 246).

Oswalt's study and Himmelheber's field report of the Bering Sea Eskimo reveal that many masks in this region were used in shamanic rituals and were created by shamans, or made by a handicraftsman with the shaman's instruction. These spiritual masks reflected the relationship between human and the spiritual animals. Some of them represented an animal while others bore a human face, but many mask images were the combination of an animal form and a human face (Himmelheber 1953: 47-60; Oswalt 1967: 229-230). Nelson collected a large number of masks in the area from the lower Yukon to the Kuskokwim. Among his collections, many carved and painted masks combined a human face and an animal image or several animals. The animals often represented were bears, reindeers, wolves, seals, walruses, birds (owls, sand-hill cranes,



sea parrots, or other uncertain birds), and salmon. If the mask only represents human face, the face is usually dramatically distorted and transformed. Many masks are fastened with appendages of feathers and carved wood images; the human hands and legs are often attached to the masks. For those masks which represent an animal while a human face is carved on the animal's body, Nelson notes, in this case, that the human face is usually the symbol of the *inua* of the animal<sup>13</sup>. Nelson also speculates that these images on the masks might reflect the mythic beings in the Eskimo mythology (Nelson 1900: 393-415).



**Figure 111. Caribou mask from Old Hamilton.** UAMN collection. UA64-007-0019, 32 cm height. Photograph by Feng Qu.

<sup>13</sup> *Inua* in the northern Alaskan Eskimo language means human being or person. It is used to call the inside spirit of an animal which resembles a human being. A detailed explanation is provided in the next section of this chapter.



**Figure 112. Owl Mask from Qissunaq, Chevak.** UAMN collection. 0314-4354, collected by Waskey in 1946, 46.5 cm length. Photograph by Feng Qu.

The religious masks were worn by the shamans and laymen during dancing in various ceremonies. They were mostly used in dances of the Bladder Festival, Messenger Festival, and other hunting festivals. The images on masks were from the shaman's spiritual visions or from traditional forms, and represented Eskimo cosmology. These mask images included mythological beings (such as raven and eagle), deities (such as sun and moon), human beings, spirits of animals, guardian spirits, and the shaman's helping spirits. The images of half human and half animal usually represented the *inua* of the animal (Ray 1967).

Qissunaq at Chevak is an isolated coastal village in the southwest region of Alaska. The old tradition of masked dancing was still practiced in 1946 when Fran Waskey visited Qissunaq. Waskey was an American trader with a long-standing interest in Yupik artifacts and was also an Alaska's delegate to the United States House of Representatives. He purchased ten dancing masks at the Inviting-In Festival. Afterwards, he also acquired five caricature masks from the villagers. The previous-obtained masks were carved in shapes of bird, fox, walrus, and fish. They were made with instruction of a shaman. The other five, made for the secular dances, were carved with human faces. All of them were sold by Waskey to the University of Alaska Museum in Fairbanks in 1947 (Fienup-Riordan 1996: 297-303; Jonaitis 1998: 22). 0314-4354 (Figure 112) is among the ten animal masks. It is a large owl mask which bears a human face on its back to represent the *inua* of the owl.

### **Shamanic Practices and Religious Ideas**

In the worldview of the Chukchi and Koryak, everything in nature had life, all material objects could think and act as human beings, and all animals had a country of their own and had personalities like human beings. Large material unities (such as forests, rivers, and lakes), as well as animals, had "masters" to live with them. The sun, the moon, and the stars were "Beings" like humans. For Chukchi, numerous other "Beings" were described in their incantations, including Creator, Upper Being, World, Merciful Being,

Life-giving Being, Luck-giving Being, House Beings, and so on, many of which received sacrifices. However, these “Beings” were not given sacrifices in the yearly ceremonials. The Creator was also called the Spirit of the Zenith, who had a Raven assistant. The Reindeer Chukchi had their special “Beings” such as Reindeer Being, where as the Maritime Chukchi worshipped Beings of the Sea and a powerful old woman named “Mother of Walrus,” who was believed to be the master of all sea mammals. The reindeer herders gave sacrifices to all directions, but the sea-mammal hunters sacrificed only to the winds. The animal “Beings” were mainly represented by the killer-whale, the giant polar bear, the black bear, the reindeer, the giant thunder-bird, the middle bird, the triton, and so forth (Bogoras 1904-1909: 277-330).

In the Koryak view of nature, all things in nature were in anthropomorphic form in the interior, and the exterior forms of things were thought of serving as a cover. The material objects thus had power to transform into human beings, while a human being was also able to transform into the exterior form of an object. In the Koryak mythology, Raven was the creator of the world (Jochelson 1908: 115-121). Jochelson relies on their mythological ideas to explain why the Koryak shaman was able to transcend into the other worlds: “In the mythological age of Big-Raven, men could ascend to heaven, and get down into the underground world, with great ease. Now only shamans are capable of doing it” (Jochelson 1908: 121). In their myths, Koryak regarded the sun as a deity, while supposing the moon, the stars, the fog, and the wind to be men (122-123).

The Chukchi tales reveal that the cosmos consisted of several levels, with the human world between an equal level number of both the upper and lower worlds. According to the claim of the Chukchi shaman, the number of the cosmos levels could be five, seven, or nine. Only the shaman had power to travel between the different worlds through holes under the Polar Star (Jochelson 1908: 331-332). In Chukchi belief, every person had several souls which belonged to his body. One of the major reasons for sickness was soul-loss (332-333).

In the Alaskan Eskimo cosmology, everything in the world had a soul spirit. As Lantis says, “Geographical features, all the animals (except the dog, in some areas), lamp,

entranceway and other items of structures and furnishings, tools, clothing, all have souls” (1950: 320). The spirits, which were human souls abiding in things and could take human form, were called *inua* by the Alaskan Eskimos. The *Inua* existed in all places, things, and the elements. Hunters at sea often offered sacrifices to *inuas* with food and water. These spirits were believed to be invisible but could be visible to shamans (Nelson 1900: 437-438). Weyer (1932) provides an etymological interpretation about the *inua* concept:

According to Eskimo belief, souls reside not only in human beings but in animals and even lifeless things. In view of the haziness of the notions regarding human souls we cannot expect the concept of other souls to be definite and consistent. At the outset, however, we see that the key to the subject lies in the nature of the human soul; for even the word *inua*, which is used to designate the soul even of an inanimate object, means “its man.” *Inua* is simply the possessive of *inuk* meaning “man,” or “person,” the nominative plural of which, *inuit*, is the term by which Eskimos refer to themselves as a people. (p. 299)

Merkur (1985) demonstrates that *inua* appeared to be the owner of the nature, and he seems more to emphasize its metaphysical conception:

An *inua* is an idea that indwells in and imparts individual character to a physical phenomenon. As one Nunamiut put it, an *inua* is the “essential existing force” of a physical phenomenon that causes it to be what it is. (pp. 225)

In the Bering Sea region, *yu-a* was the variant of *inua* in Yup’ik language. As Ray has emphasized, “The difference between *inua* and *yua* was linguistic, not conceptual” (1967:9). The masks, which were made by shamans, usually represented these *yu-a* or *inua* spirits, which had been seen by shaman. According to the shaman’s claims, the faces of these supernatural beings were “grotesque” (Nelson 1900: 398). From the observations of the Nunamiut Eskimo in the central Brooks Range of northern Alaska, Gubser

recognizes that the Eskimo believed that the *inua* not only abided in the animate objects (except for the dog) such as humans and animals but also within all inanimate objects such as lakes, mountains, the moon, directions of wind, and the atmosphere. The *inua* had personality in nature and only a shaman could see and communicate with it (Gubser 1965: 199-200).

Transformation played a very important part in Western Eskimo religion and mythology. The transformation included men changing into animals, animals changing into other animals, and animals changing into men. During the transformation, the *inua* of humans or animals was always retained. The transformation was one of the main themes in the shamanic performances and magic, and it was often represented by the shaman's artworks (Fitzhugh & Kaplan 1982: 187). Sex change could be also seen among Asiatic Eskimos (Bogoras 1904-1909: 457).

The Eskimos generally lacked explanations of the cosmos creation in their mythology (Oswalt 1967: 210). However, the Alaskan Eskimo did believe in the Raven as their creator. This information was accounted by Nelson and it was expressed by the mask dancers from the arctic coast to the Kuskokwim River. The creator was called "Raven Father," because he might retain in the raven form, but can also transform into a man. He came from the sky and made the earth and everything (Nelson 1900: 425). This Raven mythology among Eskimos implied a close tie to the Northeastern Siberian mythology (Fitzhugh 1994: 31). What is interesting is that the moon as a divinity was much more important in the Eskimo religion and mythology than the sun. In the mythology of Norton Sound and Kotzebue Sound of Alaska, moon-man was the provider of animals. The purpose of the shaman's flight to the moon was to beg games for humans (Lantis 1950: 324; Oswalt 1967: 214; Weyer 1932: 381-385). In Point Hope, every person was allowed to appeal to the Moon-man for health or hunting success (Rainey 1947: 274). The sun, in the Eskimo belief system, was not regarded as a deity with mysterious influence, but only a presence in the heaven (Weyer 1932: 385). The spirits of the Giant man and the dwarf are often described in the Alaskan legends and folklores (Oswalt 1967: 214-218).

Up to the late nineteenth century, shamanism was practiced by all indigenous peoples in the Bering Strait region, although it varies in different cultures.

Chukchi and Koryak shamanism was characterized by the “family shaman,” ventriloquism, and sex change. Family shamanism was a special style of shamanism which was held for family rituals. Every family had at least one member who had one or more drums and had the ability to communicate with spirits and even to essay soothsaying. However, among Chukchi and Koryak tribes there were still a few individuals who are inspired by spirits to be professional shamans. These individual shamans included both genders, but women are more numerous and more powerful than men (Bogoras 1904-1909: 413-468; Jochelson 1908: 47-59). The Chukchi novice shamans usually received shamanic inspiration at an early age, and the spiritual call manifested either by the order of spirits or by various omens. Becoming a shaman was a very painful process, especially for male shamans. After the novices were called, their souls had to experience suffering transformation and their normal life interests were deprived (Bogoras 1904-1909: 413-430).

Bogoras categorizes Chukchi shamans’ practices into three sorts: shamans communicated with spirits, gave magical advice, and produced incantations. Payments such as meat, thongs, skins, garments, living reindeer, and so forth, were provided to Chukchi shamans by the clients for the shamanic services. The shamanic performance was usually for the purpose of treating illness. The séance was held in the inner room of a house. At the time when Bogoras conducted his field work, the Chukchi shamans used strong tobacco as stimulants. The Chukchi shamanic songs had no words, and their music was simple. In the Chukchi séance, shamans were not singing with the audience; they only sang by themselves. The shaman’s soul travel to the spirit world was a common phenomenon in the Chukchi folklore, but rarely happened in the real séance. In the Chukchi belief, the shaman’s soul traveled during the trance state to retrieve a sick person’s soul (Bogoras 1904-1909: 430-441). In Serov’s description, only a few powerful shamans could fall into trance during singing and drum beating in order to retrieve the sick person’s soul (Serov 1988: 248). A striking magic skill in Chukchi and Koryak

shamanism was ventriloquism. As Bogoras describes, the voices sound from all directions of the room. Sometimes, the shamans could produce voices of animals and birds, and even the storms (1904-1909: 435-439). Jochelson witnessed a shaman's performance, during which the shaman made the voice of animals such as the wolf and the goose, accompanied by the strong drum beating. The shaman showed his ventriloquial skill to Jochelson to confirm he possessed a particular power (1908: 48-50).

The Chukchi shamans' performance at ceremonials was held in the outer tent. During the ceremonies, shamans played drums and sing songs with all the community members. The shamanic performance among the Chukchi was characterized by imitating the voices of animals, stamping the ground, jumping violently, and foaming at the mouth. Sometimes the body of a shaman is possessed by an animal spirit, and at this moment, the shaman gestures and acts were like a real animal. In the ceremonial performance, some shamans put on animal skins and even skulls in order to be inspired by the animal spirits (Bogoras 1904-1909: 441-443).

Sex change was a special shamanic phenomenon among the Northeastern Siberian peoples, namely the Chukchi, Koryak, Itelmen, and Eskimo (Czaplicka 1914: 248). Bogoras stresses that "The sexual organs play a part in various branches of Chukchee shamanism" (1904-1909: 448). In the yearly thanksgiving ceremony, for example, the shamans had to be naked to perform. Sex change referred to the shamanic transformation across sexes. If a male shaman transformed into a "female," he was called "soft man," which means a "being of a softer sex" (449). The sex change occurred at the command of the spirits. The degrees of transformation differed depending on the needs of the situation. The lightest degree only required the male shaman act in the manner of a woman, such as braiding hair, while the further degree entailed dressing in female clothes. The highest degree of sex change means the male shaman has to live his life like a real woman. His dressing, habit, and manner all changed completely. Even his body altered, and he spoke in a female voice. Finally, some of the male shamans would marry a husband and would often desire to have female sexual organs. However, Bogoras conducted close observations of the soft men's life and recognized that their physics were still masculine



in nature. In the Chukchi belief, the transformed shamans had more success to communicate with spirits than the untransformed ones (448-457). Jochelson has confirmed that the phenomenon of the sex change also exists among the Koryak shamans. An old male shaman, who died not long before Jochelson's arrival, "had worn women's clothes for two years by order of the spirits" (1908: 53).

The shamans among most ethnic groups have their particular ritual costume, including garment, headwear, and footwear. The images that represent the shamans' chief guardian spirits are attached to the clothing (Konovalov 2006: 99-103). Nevertheless, the Chukchi shaman did not have the special ritual costumes. In Bogoras' words, "As to the shamanic garb, the Chukchi have nothing similar to the well-known type of coat covered with fringes and images" (1904-1909: 457). Furthermore, in ritual practices, the shaman often performed with naked upper bodies. Also, the Chukchi shaman had no professional drums in a particular form, and used his ordinary family drum. There is no information that shows any decoration of the Chukchi drums (457-460). Just like their northern neighbor, the Chukchi, each Koryak shaman also used drums from the family he serves, because he did not own special drums themselves. The shamans also had no special shamanic costume to equip themselves (Jochelson 1908: 48-50).

One of the major shaman's tasks was to treat diseases. A special treatment for the Chukchi shaman was that he used a magical knife, made of iron or ivory, to pretend to operate on the patient's body. Through this symbolic surgery the shaman could inspect the internal organs and then removed the sick part from the patient. Another effective method against diseases was to use amulets. These amulets could be various pendants and tassels. They were made by the shamans with skin and beads, and were asked to be fastened to the body or clothes. The amulets were often made into the styles of personal adornments such as rings, bracelets, and necklaces, worn by the people. However, Bogoras also noticed that not all adornments were symbols of the spirits for disease treatment (Bogoras 1904-1909: 460-468).

Some material objects were used by Chukchi shamans for divination. These objects included the stone, the animal skull, or a piece of wood suspended by a string.

The Reindeer Chukchi also used the scapulae of the domesticated reindeer to divine, while the Coastal Chukchi used the scapulae of the seal for the same purpose. The shaman provided an explanation of the crack in the scapulae which results from a burning charcoal (484-490).

Compared with the neighboring Siberian groups, in the Soviet scholar Vdovin's opinion, the social role of Chukchi shamans was relatively weak in their society. The ethnographic reports and his own field materials illustrate that many Reindeer Chukchi families had no chances to invite shamans to perform in their family rites. Most times, the Chukchi families had to rely on themselves to organize the ritual (see Znamenski 2003: 272-273). This perspective implies that professional shamanism, generally speaking, was secondary to the "family shamanism" in the Chukchi society. Vdovin thus concludes that "shamanism among the Chukchis was of a simpler sort" (1976: 265).

In contrast, the Eskimo shaman in the Bering Strait region occupied a vital position in their societies. They were a group of individuals who relied on the spiritual profession to assist their community. Their important services to the community, as listed by Lantis, included providing food, healing, changing weather, preventing coming injuries, bringing personal success, and divining in order to resolve problems (Lantis 1950: 318). Turner's surveys in the 1980's at the Point Hope area reveal that shamanism was highly valued by the Inupiaq Eskimo before the arrival of the white man:

In precontact times the shaman was a valued member of the community and of great assistance to its members. The shaman could heal (sometimes by sucking out "harmful intrusions"), find lost objects, predict and change the weather, bring animals for the hunters, and revive and speak with the dead. Drumming was done in ritual performances, primarily on the occasion of some crisis. These "contingency" rituals might be necessitated by sickness, bad weather, lost hunters, other hunting needs, and so on. (Turner 1994: 146)

The Eskimo shaman generally enjoyed a high degree of respect and honor from his community. Yet the Alaskan Eskimo shaman received respect while he was also feared by the public, because he was considered a dangerous person who has power to do harm to the people. Although most shamans worked for the people in a positive purpose, not all shamans were trusted to be righteous. If the harm was initiated by an “evil” shaman, another “good” shaman would be commissioned to fight with the notorious colleague (Blodgett 1978: 213-214; Fitzhugh & Kaplan 1982: 190; Lantis 1950: 318). The shaman was called *angakoq* or *angakok* (Blodgett 1978; Lantis 1950). A traditional Eskimo community depended highly on the shamanic ritual to maintain their success in all aspects of their everyday life. Blodgett stresses, “Without a belief and trust in the *angakoq*, a person had no one to turn to in those circumstances when the weather conditions, or scarcity of game, or illness were gaining the upper hand” (1978: 214). The Eskimos were aware of some usual natural signs, such as a strange cry from a seal, and they rely on the shaman to provide them explanations. As Fitzhugh and Kaplan declare, “The shaman is specially qualified to read these signs and is practiced in the art of ritual by which he attempts to influence or modify the course of events through intercession with the spirits that control these things” (1982: 188).

The election of a shaman among the Eskimo depended on if the person had special signs at the time of his birth. But later he still needed to be identified in terms of some incidents he might have as evidence. These incidents included sickness, accidents, dreams, visions, and so forth. The spirit’s call also happened to some Eskimo shaman novices (Blodgett 1978: 33-34). A Nunivak Eskimo boy, Kangalik, often experienced some strange things and spirits in his dreams when he was eleven or twelve years old. His father, a shaman, thus taught him to practice the spiritual power, and at last he became a shaman (Lantis 1950: 313). Eskimo shamanism was greatly characterized by the shaman’s technique to fly into the upper and the lower worlds. The purpose of the flight was for the welfare of his community (Blodgett 1978: 89). In Southern and Southwestern Alaska, it was common for the shaman to travel in the land of the dead, on the moon or in

the bottom of the sea or a lake (Gubser 1965: 200; Lantis 1946: 201, 1947: 87; Nelson 1900: 428-430).

The shamanic trip to the moon was one of the unique characteristics in Eskimo shamanism. In Eskimo cosmology, a powerful man-like spirit resided in the moon. He was the controller of the animals and had power to stop epidemic diseases on the earth. The purpose of the shaman's trip to the moon was to plead the great spirit to release game to humans when kind of animals became scarce, or to request to prevent diseases from killing people (Nelson 1900: 430). An Inupiaq shaman had explained to Nelson about the Eskimo shamanic trip to the moon:

A male shaman from Kotzebue Sound near Selawik Lake told me that a great chief lives in the moon who is visited now and then by shamans, who always go to him two at a time, as one man is ashamed to go alone. In the moon live all kinds of animals that are on the earth, and when any animal becomes scarce here the shamans go up to the chief in the moon and, if he is pleased with the offerings that have been made to him, he gives them one of the animals that they wish for, and they bring it down to the earth and turn it loose, after which its kind becomes numerous again. (Nelson 1900: 515)

On all Lower Yukon regions, the shamans Nelson interviewed claimed that they possessed the power to make trips to the moon. Several shamans had told Nelson of their experience in the Moon where they requested the chief spirit to cure diseases for their villagers (Nelson 1900: 430-431).

An Eskimo shaman had to fight with evil spirits but also had support from his helping spirits. Although the shaman sought assistance of the spirit helpers, the spirits, actually, were attracted to the shaman (Blodgett 1978: 26). The spirit helpers of the shaman were varied in different Eskimo groups. Among Nunivak Eskimo, Lantis has learned from the local shamans that they included dog, walrus, worms, the half-people, the half-birds, fish, mosquitoes, ghosts, and dwarfs. Lantis also learned that the last three

spirits were dangerous. The shaman often showed his power by making the voices of his animal helping spirits, such as the walrus and sea lion (Lantis 1946: 200). Shamans on St. Lawrence Island specifically favored walruses, bears, and other arctic animals (Murphy 1964: 58). The assisting spirits of Chugach shamans “often appeared in the guise of owls or cranes,” and the male shaman worked very well with the help from a male spirit while the female shaman had a better relation with the helper of her own sex (Birket-Smith 1953: 126). North Alaskan people had two groups of helping spirits. The first group was comprised of land animals: brown bear, wolf, fox, ptarmigan, lemming, and ground squirrel. The second group was sea mammals, including walrus, seal, whale, and polar bear. Most spirits were from the first group while the sea animals were relatively rare as spirits. Also, the different spirits had different particular functions (Spencer 1959: 300-301).

The shaman functions as a leader in the major ceremonies among Alaskan Eskimos. The shamans were teachers of ritual lore and dances for the festival, and are the directors of rituals (Lantis 1947: 85-86). In Fitzhugh and Kaplan’s words, “These festivals take place over many days and require careful planning and direction. Songs and speeches are composed and memorized; drummers are instructed; dances are learned; the audience is trained to take part in sections of the performances” (1982: 194). Furthermore, the *angakoks* themselves also performed for the public by drumming, dancing, and singing. By these performances the *angakoks* relied on the help of his spirits to reveal the cause of the crisis in his community and the information for future hunting and the other events. Sometimes he practiced the exorcism for the patient (Lantis 1947: 86-90).

Shamanic practices among the Eskimos resulted in abundant symbolism in material culture. The spirits were represented by many masks in the Bering Sea region (Fitzhugh & Kaplan 1982: 194). These religious masks were usually carved directly by shamans or by others at the shaman’s instruction (Lantis 1947: 90). Many masks with a diversity of forms and styles were discovered on the Bering Sea coast. A great variety of motifs were represented, which included humans, animals, spirits, plants, celestial bodies, and other physical objects (Fitzhugh & Kaplan 1982: 196). Although the original

meanings of many masks still remain vague, in terms of the ethnographic information from Nelson (1900), Zagoskin (1967), and integrated analyses from Ray (1967), Fitzhugh and Kaplan (1982) generalize the basic art characteristics of the religious masks in the Yukon and the Kuskokwim region:

As a mask maker, the shaman has at his fingertips the special motifs and forms that are used to communicate information to the human and spiritual audience about the subject of his performance. This is done through using standard motifs understood by others in the same way that illustrations on ladles symbolize myths. Among the more common forms used for this purpose are black spectacle-like goggle placed over the eyes of masks; single red eyes; white, red, or orange spots; crescent eyes; twisted mouths; “male” and “female” mouths; peg teeth; red-painted grooves; pierced hands; thumbless hands; spirit “whiskers” and “spikes”; cuffed and collared images; encircling hoops; appendages; spirit-links; lifelines; feathers; red-painted eyes, nostrils and eye holes; blood splotches; darkness and light; and other forms of imagery. (p. 197)

According to Ray, when the shaman fell in a trance state and his soul was travelling in the spiritual world, he was able to have visions of the spiritual beings. The purpose of the shaman’s masks was to represent these supernatural beings and to utilize them in the ceremonial performance, providing interpretations of the supernatural world to his community and building a balanced relationship between the human and spirits. This relationship was very important for the Eskimo shamans because, in their belief, the spirits were the controllers of food, weather, and life (1967: 8). For the function of the masks, Ray also realizes that “the shaman most commonly used masks to consult with spirits at a time of crisis” (18). Among the large number of Yupik Eskimo masks collected by Nelson, some of them represented animals but with human faces. In Nelson’s explanations, these human faces are the *inuua* of the animals (Nelson 1900: 393-415). It is worthy to note that the masks were only worn by men while women wore finger masks on their fingers (Collins 1973: 17). Many of masks from Pastolik Eskimo of

the Bering Sea coast among Nelson's collections represented a special spirit, *Tungat*. Although they were actually malevolent beings, the shaman utilized them as his tutelaries. The masks representing *Tungat* were usually described as a human face but one of the eyes was painted red (Fitzhugh & Kaplan 1982: 198; Ray 1967: 11). A large mask, which represented the powerful spirit dwelling in the moon, was collected by Nelson from the Lower Yukon River in 1879. This mask is indicated with eyes, large nostrils, and toothy mouth flanked by two human hands. It is also ornamented with swan feathers and other small animal figures such as seals and whales. It is too large to be worn by a person and its width even reaches 93 cm (Figure 113). Such large masks were usually hung from the roof and shamans and other dancers performed behind the mask in ceremonies.



**Figure 113. Wooden Mask from the Lower Yukon.** NMNH collection E33118-0, 93 cm width. After Fitzhugh 2009a: 177, Fig. 18.

The spiritual images were also painted or incised on the utensils, working tools, hunting implements, and the other staff by Bering Sea Eskimo. The bird *inua*, combining bird and human images, was, for example, not only seen on masks, but was also frequently represented by the ivory spear guard (Fitzhugh & Kaplan 1982: 193). Many seal-man images were shown in wooden boxes and wood or ivory carvings, suggesting the transformation between men and seals (187). The other transformed motifs, including bear-seal, man-worm, bear-whale, man-walrus, were described by Nelson in his report (Nelson 1900: 446-449). The special skeletal patterns were emphasized by Fitzhugh and Kaplan (1982: 200), which formed an artistic style to depict fish and sea mammals usually on bag fasteners.

It was common for an Eskimo shaman to use carvings in recording his vision experience. When Rainey was staying in the Tigara village, a villager Agaveksina told Rainey that his uncle, Asetcuk, was an *angatkok*. Asetcuk, the shaman who lived in the nineteenth century, was famous for his power of flying. Once when he flew over a Siberian village he met a Siberian shaman who was also flying over the village. After coming back, Asetcuk carved two wooden figures to represent himself and his Siberian friend as pogoks to be hung in the ceremonial house. Agaveksina made copies of these two figures for Rainey in 1940 and now they are deposited and displayed in UAMN (Rainey 1947: 248). 1-1940-0144 is the figure to depict Asetcuk in flight, and 1-1940-0143 is his Siberian shaman friend, who had a curious position in flight, with one leg drawn up (Figure 114).

In the 1940s when Rainey lived at Tigara and in the 1970s when Tom Lowenstein visited this village, the Tigara people still remembered that the shaman Asetcuk, who passed away in the turn of the nineteenth and the twentieth century, possessed a powerful animal effigy, called a *kikituk*. As the shaman's familiar, *kikituk* helped Asetcuk to punish evil rivals, cure illness, and predict the weather (Jonaitis 1998: 164; Lowenstein 1992: 139-151; Rainey 1947: 277). In Lowenstein's report (1992: 149), Asetcuk (or Astchaq) was the last great adept shaman to use *kikituk* at Tigara. Rainey claims that the *kikituk*



“can kill a person at close range as surely as a double-barreled shotgun” (1947: 277). Lowenstein (1992) has noted:

The kikituk, a shaman’s familiar carved from ivory or wood in the shape of a fabulous ermine or weasel, functioned as a *tupitkaq*<sup>14</sup>, a shaman’s animal power-object. When not in use, the kikituk lay in the *aṇakkuq*’s iglu “to keep warm.” Otherwise, it traveled under the shaman’s parka or “inside his body,” entering and leaving through the mouth or armpit when magically animated. The creature had the curative power of “biting” the spirit that was causing a client’s illness. The kikituk was also used in sorcery, being made to burrow into an enemy’s body until it reached the heart. (p. 149-150)



**Figure 114. Wooden figures of flying shamans.** Collected by Rainey from Point Hope in 1940. UAMN collection. Left to right: 1-1940-0144, Inupiq shaman, 20 cm length; 1-1940-0143, Siberian shaman, 34.3 cm length. Photograph by Barry McWayne.

<sup>14</sup> *Tupitkaq* means “shamanic practice involving reconstruction of dead animals or sending out of power object” (Lowenstein 1992: 214).

Such an animal effigy was excavated from an old village site at Point Hope by Nashukruk Nashooklook in 1939 and was soon sold to Rainey. Now it was deposited in UAMN (Jonaitis 1998: 164). This is a carved wooden figure, cataloged with number 1-1940-0138AB in UAMN, and equipped with sharp fox teeth. The lower jaw is loose so that it can be separated from the main body for a method of disempowered storage (Figure 115).



**Figure 115. Inupiaq Kikituk from Point Hope.** UAMN collection. 1-1940-0138, 37.5 cm length. Photograph by Feng Qu.

The Eskimo shaman's helping spirits might also be represented by the mummified body or the skin of a bird or an animal. A wooden box containing the shaman's spiritual objects was collected by Harold McCracken, the leader of Stoll-McCracken Expedition of The American Museum of Natural History, from a shaman on the Little Diomed

Island in 1928. The objects contained in the box include two ermine pelts, a seabird mummy in wrapping, and a wrapped hawk head (Figure 116). There are more magic articles included, such as a copper bell, fur tassels, a jade awl-shaped object, a bone spoon, an ivory needle, and so on. According to McCracken's field notes, the box had been used by the shamans for over a hundred years, and the articles contained assisted the shamans to cure every kind of sickness that the local people ever might have.



**Figure 116. Shaman's spiritual objects from Little Diomed Island.** UAMN collection. 1. UA75-049-0001NO, ermine pelts, 28 - 34 cm length. 2. UA75-049-0001C, seabird mummy, 30cm length. 3. UA75-049-0001D, hawk head, 12 cm length. Photograph by Feng Qu.

Various charms and amulets were used by all indigenous peoples in the Bering Strait region. Every Chukchi or Koryak family had charms as family guardians which were supposed to protect their properties. The Maritime Chukchi used a charm string to tie human-form guardians, animal amulets, and fire-boards together as their family guardian. Some charms from the charm strings were carved wooden figures representing both genders: male and female. Carved wooden animals and birds were also tied to the charm strings. Some charms, including old worn-out harpoon heads, heads of large gulls, small pieces from parts of whales' bodies and divining stones, were sewed in a small skin bag as the boat guardians (Bogoras 1904-1909: 339-367). Among Koryak, Some small-sized *kalaks* were tied with a string. The faces could be either human or animal. A snow beater of antler with a carved raven beak at an end was suggested to be a guardian by Jochelson. A model of a house ladder, the top of which was engraved into human faces, was called "Old Woman," representing a guardian to protect the family from evil spirits. Some guardians such as forked alder-twigs and wooden *kalaks* were placed in the prow of the boat when the boat starts to launch in the spring. According to Jochelson's opinion, the women's hair string, bracelet, and necklace all served as amulets against diseases (Jochelson 1908: 32-46). The Aleut people also used human figurines, made of wood or stuffed skins, as amulets. They were carried until the end of the winter festivals and then are destroyed (Dall 1878: 4-5; Lantis 1947: 79).

The body adornments of the Eskimos had a strong function to serve as charms and amulets. The most striking body adornment was the earrings worn by both Eskimo men and women in the vicinity of the Yukon and the Kuskokwim. Various ivory earrings with abundant symbols are seen in Nelson's collections. They were carved either in a human face, an animal form, or in geometric concentric circles (Nelson 1900: 52-57). These charms seemed to have a similar expression as masks and might present *inuua* which served as the amulets. Large similar charms were used to ornament hunting and fishing equipment by the people of the Bering Sea coast. The ivory cord attachers, for example, were often carved into a fox, a sea parrot, or a human face in both genders. Similar

amulets as small arts of hunting tools also included float plugs and finger rests (Nelson 1900: 140-147; Fitzhugh & Kaplan 1982: 60-85).

When Otto Geist was in the archaeological field on St. Lawrence Island in the late 1920s, he once requested to take part in a whale hunt. Although his friend Otiyohok accepted him, the boat captain, Otiyohok's Siberian cousin did not agree because Geist did not possess a charming belt. Until Otiyokhok gave his only leather belt to Geist, the captain was calmed down and accepted him to be with them in the hunt. The belt had attached many amulets, such as beads in different colors, ivory harpoon heads in normal sizes and small toy-like sizes, an ivory human face, and ivory animals such as whale, bear, seal, walrus, and bird. This belt is now housed in UAMN with a catalog number UA64-021-0134 (Figure 117). Geist's experience confirms that charms and amulets are indispensable equipment in sea hunting among Eskimos.



**Figure 117. Siberian Yupik charm belt from St. Lawrence Island.** UAMN collection. UA64-021-0134, collected by Otto Geist, 94 cm length.

### Summary

In this chapter, my review of the ethnographic art and religious practices in the Bering Strait region demonstrates that Eskimo art was mainly produced from daily life,

ceremonialism, and shamanic practices. The artworks of the Bering Strait can be generally divided into two categories: secular art and spiritual art.

The secular art included clothing and basketry, children's toys, pictographic art and carvings for depicting daily life, and masks for amusement purposes. While the clothing of the Koryk, the Itelmen, and the Aleut were characterized by complex geometric, plant, and animal designs, the Inupiaq, Yupik, and Aluttiq Eskimos had relatively simpler decoration designs on clothing. Geometric or plant/animal motifs seemed to be more decorative than representative and totemic, thus possibly serving an aesthetic purpose in daily human life. The children's toys constituted an innegligible part of the iconographic complex. Dolls made for girls were the most fashionable objects among the various children's toys and were the most impressive to the field explorers.

Among the most impressive pictographic artworks were the Inupiaq ivory engraving, which tastefully described the Eskimo's hunting activities, ceremonial celebrations, and other daily activities on the walrus tusks. They were most likely created to record the year-round activities and to function as a semiotic system. The Koryak and the Aleut usually used carvings to express the same realistic themes. While the religious purposes were represented by some masks, other masks were used for amusement in the celebrations among Inupiaq and Yup'ik peoples.

Spiritual art included the pictographic art for depicting mythical beings, amulets and charms, sea hunting hats, and masks for shamanic ritual.

Among the Yupik, many box lids, food bowls, spoons, ladles, and other wooden utensils were painted with mythical beings (Nelson 1900: 73-63, 93-100). Amulets and charms were commonly used by the peoples of the Bering Strait region. Wooden figurines in human or animal form were attached to the body adornments (such as the necklace and the belt) and to houses as personal and family guardians. The ornaments which were carved in human or animal form and attached to hunting and fishing tools, such as ivory cord attachers, float plugs, and finger rests, also served as amulets (Fitzhugh & Kaplan 1982: 60-85; Lantis 1947: 80; Nelson 1900: 140-147). The wooden sea hunting headgears were used by sea hunters among the Yup'ik, the Pacific Eskimo,

and the Aleut. Some scholars suggest that the hats, like the ritual masks, had a ritual significance and reflect the inspirations of the shamans (e.g., Ivanov 1991: 126-127).

While some masks were used for a secular purpose, others were made and worn for religious purposes. The religious masks were carved by the shaman or made by others under the shaman's instruction (Fienup-Riordan 1996; Nelson 1900; Ray 1967). Many images on the Eskimo masks reflected the supernatural beings which were seen by the shaman when he fell into a trance state (Ray 1967: 8).





## **Chapter 5: Ethnographic Perspectives of Archaeological Artifacts**

Prehistoric Northern Maritime Cultures had the similar form of life styles as historical Eskimos. People living in the Bering Strait region strongly relied on maritime adaptation to the arctic, which was characterized by sea mammal hunting. The same material assemblage used by historical/modern Eskimos can be traced to Okvik culture. Fitzhugh and Crowell have listed these material traits: “semi-subterranean houses; stone or clay lamps for burning sea-mammal oil; hooded parkas made from furs, bird skins, and intestines; tools made from ground slate, including women’s semi-lunar ulu knives; toggling harpoons and barbed darts for sea-mammal and bird hunting; snow goggles; and skin-covered kayaks and large open boats (umiaks)” (2009: 26). A strong artistic tradition, characterized by decorative and sculptural art, also started from 2,000 years ago and continued to the historical period.

This cultural continuum indicates that ethnographic analogy can be a valid method to interpret these prehistoric cultures. Based on this perspective, this chapter employs the ethnographic data to interpret prehistoric motifs in the Bering Strait region. For nearly one century, many scholars have provided such ethnographic analyses of the ancient art in the area (e.g., Arutiunov & Fitzhugh 1988; Arutiunov & Sergeev 2006[1969], 2006 [1975]; Collins 1937, 1973; Larsen & Rainey 1948; Fitzhugh 2009a; Fitzhugh & Kaplan 1982; Crowell 2009; Rainey 1941a), and their works inevitably become a strong research basis for my following investigations.

The art styles found from prehistory in the Bering Strait region mainly include geometric forms, animal images, and human images. The ethnographic literatures provided rich information related to animal and human images carved or incised on ivory, antler, or bone objects. However, except for circle-dot motif, there is almost no ethnographic trace to detect the meanings of geometric forms incised on various artifacts. In contrast, explanations of the circle-dot motif have been provided in several scholars’ ethnological studies (Fienup-Riordan 1988, 1990; Nelson 1900). For this reason, I

specifically select circle-dot motif in addition to animal images and human-formed figurines as one of my focuses in this chapter.

### **Circle-Dot Motif**

Circle-dot motif was the most prominent element among the decorative designs of the Northern Maritime cultures. It flourished in Okvik/OBS period and continued to be developed through Punuk and Thule cultures until the historical period.

Comparatively, the double concentric circles or ovals in Okvik culture were fewer than those in OBS culture. Most circle-dot designs on Okvik ivory implements were singular. While some of such designs were decorated on the rim of a harpoon head or a dart head (Figure 14-1, 14-2, 14-3), others were placed on the central area of an object (Figure 11, 14-4, 118, 119). UAMN specimen 1-1931-0996 (Figure 11), an ivory counterweight, bears a large nucleated oval at the central section on the face side. UAMN specimen 1-1931-0689 (Figure 119) is an ulu handle with an owl head on one end. This ivory object has the same large circle-dot design decorated on each side. Many nucleated circle/oval designs of Okvik culture are attached with two or three long sharp spurs. Rainey has reported two counterweights decorated with multiple small circle-dot figures with sharp spurs (1941: 521-521) (Figure 10-1, 10-2). A small ivory container has a large central circle with rudely incised spurred line designs (Figure 118). UAMN specimen 1-1931-0999 (Figure 120), an ulu handle, has two small circles with spurs on each side. Concentric circles of Okvik culture obviously have different sizes; some are large and others are small. 1-1931-0713 (Figure 121), an ivory sled runner, has three concentric circles on each side. The one at one end is large, another one at other end is small, and the circle-dot figure at the middle has a size between the large and the small.



**Figure 118. Ivory container from Okvik site.** UAMN collection. 4-1934-1205, 4.2 cm height. Photograph by Feng Qu.



**Figure 119. Ivory ulu handle from Okvik site.** UAMN collection. 1-1931-0689, 13.1 cm length. Photograph by Feng Qu.



**Figure 120. Ivory ulu handle from Okvik site.** UAMN collection. 1-1931-0999, 8.3 cm length. Photograph by Feng Qu.



**Figure 121. Ivory sled runner from Okvik site.** UAMN collection. 1-1931-0713, 11.1 cm.

Okvik culture does have many artifacts decorated with eye motifs. However, in comparison with OBS culture, most eye designs in Okvik culture are more realistic, not

expressed with circles and dots. A pair of realistic human eyes were incised on the end of a T-shaped ivory object (Figure 17-3). Similar eye designs are also seen on a counterweight reported by Rainey (1941a: 520-521) (Figure 10-2). The eyes and eyelashes are realistically indicated. However, the large ovals surrounding eyes resemble the OBS eye design. An ivory dart foreshaft is carved in shape of an animal and uses paired circle-dot figures to indicate eyes (Figure 17-1). UAMN specimen 1-1931-0803, an unidentified ivory object with a usual shape, bears a pair of concentric circles. The eyebrow-like designs above the circles suggest the circles represent eyes. These two samples in turn suggest that Okvik culture preceded OBS culture to use concentric circles to resemble eyes.

During the OBS period, a large numbers of harpoon heads, counterweights, socket pieces, and other implements were decorated with paired concentric circles or ovals to represent animal eyes. Most harpoon heads bore such motifs (Figure 30, 31, 32, 33, 34, 35, 36, 37), suggesting the whole body of the harpoon heads is a powerful being. Three pieces of evidence confirm that these double nucleated circles/ovals represent beast faces. First, some artifacts were not only incised with paired circles/ovals, but also indicated with nostrils and toothy mouths. UAMN specimen 1-1934-1481 (Figure 36), an ivory harpoon head from the Kukulik site, is carefully decorated with eyes, nostrils, and a toothy mouth. The mouth is indicated with a design composed of curved double lines with short cross lines towards the harpoon point. 1-1931-0993 (Figure 39-2), an ivory blubber scraper also from the Kukulik site, is decorated with two large nucleated ellipses. The converging lines form a large triangle shape which may resemble a snout, and the toothy mouth is also clearly indicated. Second, many nucleated circles or ovals were also attached with eyelash-like designs. 1-1931-0993 is marked with ticks below the eyes to represent the eyelashes. 1-1933-8569 (Figure 32), a harpoon head with side blades excavated from the Kukulik site, has a pair of large eyes. Below the eyes, eyelashes are indicated. Interestingly, the eyes engraved on a Kukulik-found socket piece are not indicated with normal circle-dot motif, but with double curved lines combining eyelashes (Figure 39-1). Third, many double circles or ovals encircled a boss-raised elevation

(Figure 30, 31, 32, 36, 37, 39-2, 39-3, 44, 45-2, 46-1). Such raised bosses never occurred with a single circle-dot motif, suggesting that the double bosses with the encircling circles or ovals represented eyes. A counterweight UA64-021-1012 (Figure 46-1), possibly from the Kukulik site, is decorated with a master predator on one side, represented by a pair of large nucleated circles which surround raised bosses and encircle central punctures. However, the other side of the counterweight bears several large and small circles with punctures but without bossed elevations.

The circle-dot engravings shifted from the freehand style in OBS culture to a formal and mechanical style in Punuk culture (Wardwell 1986: 21-23). The Punuk circle-dot designs were characterized by the flowing aspects. First, all concentric circles were made with a compass-like tool, and thus the circles are perfectly round and all circles on the same artifact have exactly the same diameters. Second, the double nucleated circles to represent bear faces were still used by Punuk predecessors (Figure 59, 60), but showed a reduced manner. The snout and the toothy mouth disappeared, and the raised bosses no longer occurred. Third, many ivory implements were decorated with circle-dot figures and small punctures, and these circles and punctures are usually linked by straight or curved lines (Figure 59, 60).

The central dots of the nucleated circles or ellipses in OBS and Punuk cultures were often in the form of a small drilled hole. In Punuk culture, the punctures had become a dominant motif for the decorations of the implements, and they were often decorated on the whole body of an artifact but without the circles. UAMN specimen 1053-0002 (Figure 68-2) is a Punuk knife handle in the shape of a whale collected from an unknown site on St. Lawrence Island. Its whole body is decorated with such small holes. 1-1927-0258 (Figure 122) is a Punuk wrist guard collected by Geist from the Miyowagh site at Gambell. It also bears such a similar design composed of various lines and numerous small punctures. The OBS punctures are found with plugs of fossil ivory, wood, or baleen, and the punctures of Punuk culture are usually plugged with feather quill or seaweed fiber (Fitzhugh 2009a: 173).



**Figure 122. Wrist guard from Miyowagh site.** UAMN collection. 1-1927-0258, Punuk culture, 12.0 cm length. Photograph by Feng Qu.



1



2



3

**Figure 123. Artifacts with circle-dot motif in Jacobsen's collection at The Ethnologisches Museum Berlin.** 1. IVA4964, wood container encircled with a bone

ring, after Fienup-Riordan 2005: 123. 2. IVA4774, Nushagak ivory comb, after Fienup-Riordan 2005: 182. 3. IVA5347, ivory needle case, after Fienup-Riordan 2005: 197.

The circle-dot figures of Thule and historical Eskimo cultures generally had no difference with Punuk culture. The concentric circles in the Thule period were still compass-made and the circles or the punctures are joined by engraved lines (Figure 92-4, 85-5, 87-2, 89, 90). UAMN specimen 1-1949-4158 (Figure 90) is an ivory line attacher in the form of a bear head. There are three rows of punctures ornamented on the back and all small holes in each row are joined by a line. According to the excavator, these punctures still retain the bases of feathers. It can be assumed that this attacher had been ornamented with a crest of feathers when it was in use (Giddings 1964: 79). A unique characteristic of Thule circle-dot motif was that the exterior ring of a nucleated circle was often attached with several short cross lines. An ivory cord attacher (UAMN specimen 1-1949-4095, Figure 89-1) from the Iyatatet site has double concentric circles to form eyes on each narrow side. Above the eyes one more singular circle-dot figure is placed. Every nucleated circle was joined with several short lines, recalling the sharp spurs attached to the circle-dot figures used by Okvik culture.

Numerous ivory artifacts with circle-dot designs were collected by Nelson at the end of the nineteenth century (Nelson 1900). In 1882 and 1883, a Norwegian ethnographer Johan Jacobsen represented The Ethnologisches Museum Berlin to collect Yupik artifacts at the Alaskan Bering Sea coast. Like Nelson's, Jacobsen's collection also includes a large number of artifacts ornamented with the circle-dot motif (Figure 123). The circle-dot motif during the historical period was seen on many ivory objects, including hunting implements such as harpoon heads, attachers, and pendants of hunting hats; utensils such as bag handles, bag fasteners, needle cases, and awl handles; and other implements such as children's story knives, earrings, and smoking pipes. The large concentric circles were often engraved on ivory objects ornamented on wooden hunting helmets. UAMN specimen UA64-021-0917 (Figure 124-1), collected from Hooper Bay,



is a wing-shaped decorative piece for the side of a hunting helmet. Three large concentric circles are shown on the surface. UA64-021-0916 (Figure 124-2) is another decorative piece of hunting hat from Hooper Bay. This piece represents the head of a cormorant. A side eye of the bird is expressed by a large circular design with a drilled hole in the center, and its mouth is represented by a long groove attached with tick marks.






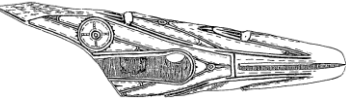

1






2

**Figure 124. Ivory decorative pieces of hunting hats from Hooper Bay. UAMN collection. 1. UA64-021-0917, 19.8 cm length. 2. UA64-021-0916, 21.0 cm length.**

**Table 2. The evolutionary sequence of circle-dot motif in the Bering Strait region**

Cultures	Style	Samples
Okvik	Freehand engraving; attached with sharp spurs; singular nucleated circle at the center of the design; usually set in a converging line design.	 (See Figure 120)  (See Figure 14-4)
OBS	Freehand engraving; sharp spurs; paired nucleated circles or ovals with raised bosses and eyelashes to represent eyes; set in a curvilinear design; plugs of ivory, wood, or baleen.	 (See Figure 46-1)  (See Figure 38)  (See Figure 39-2)

Punuk	Compass-like tool made and perfectly round; paired nucleated circles; jointed by lines; plugs of feather quill or seaweed fiber.	 <p>(See Figure 59-1) (See Figure 61-1)</p>
Thule	Compass-like tool made and perfectly round; paired nucleated circles to represent eyes; jointed by lines; plugs of feather quill; attached with short cross lines.	 <p>(See Figure 89-1) (See Figure 87-2)</p>
Historical Eskimo	Compass-like tool made and perfectly round; paired nucleated circles to represent eyes; plugs of feather quill; attached with cross lines; large circular designs.	 <p>(See Figure 108) (See Figure 124)</p>

Fienup-Riordan has documented the spiritual knowledge embodied in the Yup'ik art symbolism through interviewing Yup'ik elders (1988, 1990, 1994, 1996, 2005, 2007). In the Central Yupik language, according to her, the circle-dot motif is designated *ellamiinga* which means "the eye of awareness" (Fienup-Riordan 1988, 1990). The nucleated circle is literally referred to as part of a skeletal motif: a joint mark (Fienup-Riordan 1988: 261). Phyllis Morrow has also revealed this Yupik traditional metaphor:

The circle-and-dot motif is often seen on the "joints" of carved supernatural beasts. This placement is suggestive of a number of customs that involve marking, cutting, or binding joints, all of which relate to boundaries or a change of state or passage from one "plane" to another. At puberty, for example, a young woman's wrists were tattooed with dots. Red string around an infant's wrists protected it from harm. Strings were also tied around joints to prevent diseases from progressing past these points. (Fienup-Riordan 1990: 53)

Fienup-Riordan has noted that "the circle-and-dot motif with spiritual vision and transformation abound in the Yup'ik ethnographic data" (1990: 53). That is to say, "Not only did eyes mark joints, but joints were, on occasion, explicitly given as the home of spirits with eyes" (54). The Yup'ik shamans used circle-dot to mark spiritual eyed joints and young men sometimes used the same motif to mark their wrists and elbows when they first killed animal species. Fienup-Riordan has thus realized that "In both the shaman's eyed joints and the puberty tattoo, the circle-and-dot design connotes enhanced vision effected through spiritual and social transformation" (55).

Circle-dot motif among the Yup'ik people also resembled the large hooped masks to functions as eyes into the spiritual world from the human world (Fienup-Riordan 1988: 266, 1990: 59). According to Himmelheber's field report of Kuskokwim Eskimo, the concentric rings on hooped masks were a symbol of the cosmos and embodied five upper worlds and the human world (Himmelheber 1953: 58). During the Doll Festival held by the Eskimo of the Lower Yukon, two large hoops were hung from the roof of the *qasgiq*

extending entirely around the room. Many rods were suspended from the roof hole down to the upper hoop, and both rods and hoops were fastened with tufts of feathers. As Nelson has recorded, “These hoops and rods represented the heaven arching over the earth, and the tufts of feathers were the stars mingled with snowflakes” (1900: 496). The treatments of hoops and feathers in the *qasgiq* expressed same cosmological ideology as hooped masks. Sometimes the mask hoops were replaced by the encircling grooves (Fitzhugh & Kaplan 1982: 201). The hooped masks were also called *ellanguat* in central Yupik language, which literally means “pretend cosmos” or “universe” (Fienup-Riordan 1988: 266; 1990: 59). As Fienup-Riordan (1990) further points out:

Traditionally, the (mask) face was the visual means of representing and embodying an other- world reality for human audiences. At the same time it was the means of seeing into the human world for that other reality. The mask is literally and figuratively a ringed center. As such, it is a condensed image of the traditional Yup’ik universe as well as the cosmological system that defined it. The ring center is an often-repeated image obvious in many contexts once the concept of vision and spiritual transformation that it embodies is revealed. (p. 59)

The spiritual significance of circle-dot motif is thus revealed. It was a symbolic eye to see from the human world into the spiritual world or from the spiritual world into the human world. It is also a joint or a passage between the two worlds. As Morrow has concluded:

Circle and dot placed at the joints thus recall the ability to pass from one world to another, perhaps representing the holes through which the passage was effected. The ability to see into other worlds was also characteristic of the shaman. Thus, it is particularly appropriate that the circle and dot, both an eye and a hole, equates physical and spiritual movement between worlds. (Fienup-Riordan 1990: 53)

The circle-dot motifs were not only decorated on various implements, but also often incised on carvings of animals during both prehistoric and historic periods. The nucleated circles on the animal carvings represented joint marks which were the residing places of spirits (Fitzhugh 2009a: 170). In Eskimo knowledge, in every joint of the human body resided a soul (Weyer 1932: 291). The circle-dot motifs as joint marks thus provided a home for spirits (Fienup-Riordan 1900: 54).

As a significant metaphor, therefore, circle-dot motif in the prehistoric and historic symbolism in the Bering Strait region can be understood in three dimensions.

First, it represented eyes to see from the human world into the spiritual world or from the spiritual world into the human world. The paired concentric circles were decorated on ivory implements from 2000 years ago until the historical period. It is undoubted that this common Eskimo eye motif symbolized a supernatural being. This eye motif was mainly used to decorate the hunting equipment, such as harpoon heads, counterweights, and socket pieces, but it can also be seen on the other implements, such as blubber scrapers, needle cases, and spoon handles.

Second, it was a metaphor of joint mark. The large singular circle on the central area of a Okvik artifact, the multiple circles or a singular one on an OBS implement, and the several compass-made circles jointed by incised lines during Punuk, Thule, and historic periods, all expressed such a cosmological idea. Meanwhile, the circle-dot motif can be also seen as an eye, namely, a joint represented by a nucleated circle was an eyed joint. They had an ability to see into other worlds like the eyes represented by double circles. It was a passage or a hole for spirits to pass through between the different levels of the cosmos. It also provided a home for spirits to reside. Many Okvik harpoon heads and dart heads, for example, bore a singular concentric circle on the rim (Figure 14-1, 14-3). These singular circles possibly not only represented joint marks for spirits to reside in, but also spiritual eyes.

Third, the circle-dot motif represented the multilevel universe or the cosmological system. UA64-021-0917 (Figure 124-1), an ornamental piece of a hunting hat from the historical period, is engraved with three large concentric circles on the face side. These

designs are composed of successive levels of encompassment and are most likely to depict the multilevel universe. UA79-053-0106 (Figure 38-1), an OBS harpoon head, has a singular concentric circle on one side of the spur. This special figure is called “wheel-shaped design” by Geist and Rainey (1936: 208). The design is composed of six levels of rings; three small rings form the hub, and another three big rings represent the rim. The rim and hub are joined by four spokes. The exterior circle is attached with spur-like lines. This special OBS circular design, in my opinion, possibly represents the leveled cosmos.

The circle-dot motif was in most cases decorated on hunting implements, especially on harpoon heads. In Eskimo cosmology, beneath the sea was other world where the spirits of sea animals resided. A Yup'ik shaman often traveled down through a hole in the ice to visit the spirits of the game to invite them to come back to the human world as game (Fienup-Riordan 1988: 262). One tale tells that a Little Diomedes hunter, Manina, was taken beneath the sea where he met the chief spirit (Ray 1967: 12). One of Fienup-Riordan's informants, Paul John, told her that the shamans “are able to would go down into the ocean in the winter to conjure up plenty of seals or any other sea mammals, so that in the spring when people started going hunting, there would be plenty of them to be caught” (Fienup-Riordan 1996: 64).

A harpoon head bearing circle-dot motif was thus a cosmological symbol which was able to pass from the human world to the spiritual world beneath the ocean. It was a traveler into the other world or a mediator between the worlds like a shaman.

Many of the harpoon heads were carved in the form of a bird. The blade slot possibly symbolized the bird's mouth and the round hole resembles the bird's eyes. This form represented the most common harpoon heads of both prehistoric and historic cultures in the Bering Strait region. Some harpoon heads of OBS culture had sculpted wings with delineated feathers (Fitzhugh 2009a: 176-177; Ray 1961: 16). Figure 125 compares an OBS harpoon found at the Kukulik site with a beak of loon, which was possibly a charm of the historical period. From the comparison we are able to find the similarity of their shapes. This type of harpoon head resembled one type of decorative piece ornamented on the hunting hat (Figure 124-2).

There was another common type of harpoon head which were characterized by the trifurcated or bifurcated spur. These included some historical harpoon heads (Figure 105) and OBS harpoon heads identified as Type J by Geist and Rainey (1936) (Figure 32, 33, 34). Kukulik Type J does not have a bird's mouth carved, but the three prongs were used to symbolize a bird's tucked plumage the same as those historical harpoon heads (Fitzhugh & Kaplan 1982: 79, 81).



1



2

**Figure 125. Bird beak and harpoon head. UAMN collection.** 1. 1-1927-0310, beak of loon with thong, from St. Lawrence Island, 11.7 cm length. 2. 1-1931-0982, OBS harpoon head from Kukulik site, 8.2 cm length. Photograph by Feng Qu.



Birds, such as raven and loon, were powerful helping spirits for the Eskimo shamans. The loon was employed by the shamans in the western arctic and Siberia as a particularly prevalent spirit (Blodgett 1979: 50). Whether among Copper Eskimo, at Barrow, Kotzebue, or on Sledge Island, a loon's bill was often treated as a part of dance costume and all these dances are related to shamanism. A loon's skull from the Ipiutak cemetery was plugged with artificial eyes with a respectful attitude. According to the ethnological data, Larsen and Rainey suggest that this phenomenon may "demonstrate that the loon played a role in the religious beliefs of the Ipiutak people" and "It may have represented a shaman's protective spirit" (1948: 121). Among Tigara Eskimo at Point Hope, every hunter had his own animal helpers, and the loon was among the most common animal helpers, for it was a powerful diving creature (Rainey 1947: 254). The similarity of the shapes between the beak of loon and the Okvik and OBS harpoon heads (Figure 108) may also suggest that these harpoon heads possibly represented the loon bird. The circle-dot motif as a joint mark or a spiritual eye was actually able to animate the ivory harpoon in a loon's form which might have carried powerful spirits dwelling in joint marks with the ability to see into other worlds. The hunting action thus metaphorically became a supernatural journey from the human world into the spiritual world beneath the sea.

### **Animal Images**

Zoomorphic art made of ivory, bone, or wood played a central part in the Bering Strait symbolism from the Okvik and OBS era to the historic period. The species of zoomorphic beings included sea mammal, land animal, and bird. The animal figures of OBS culture and Punuk culture were usually ornamented with the decorative designs in OBS or Punuk style. In this section, I generally divide these animal sculptures into two types. Type A is the implements which are carved in animal form. It includes hunting tools, such as harpoon socket pieces, counterweights, hooks, toggles, and drag handles; women's tools, such as ulu handles, spoon handles, pottery paddles, and needle cases;

and some ornamented objects attached to other implements. Type B is freestanding figurines.

Type A is further broken up into Type A-1 and Type A-2. Type A-1 is the animals and birds, whereas Type A-2 is therianthropic beings formed from human and animal transformation.

Type A-1 occurred through all Northern Maritime cultures and historical Eskimo culture. The most frequent species were polar bears, seals, wolf-like predators, and birds. Collins records an ivory bear with an OBS design in his St. Lawrence report (1937: 49-50). The bear's legs are very short so that the figure is supported by its belly and lower jaw rather than legs. The bear seems to be attached to some flat surface (Figure 48). Implements in seal shape were also a common motif in Bering Strait symbolism. UAMN specimen 4-1934-0695 is a seal head excavated from the Okvik site, and seems a broken part from a handle (Figure 24-1). A harpoon rest with Punuk design from the Kukulik site is carved in a seal shape (Figure 67-1). Such harpoon rest was used with an umiak. An ivory bladder mouthpiece from Nukleet site is also carved in a seal shape (Figure 91-2).

Ethnographic collections include numerous such implements in the shape of a polar bear, a seal, or other animals. Figure 106 illustrates three ivory pieces attached with sea hunting cord. They are carved in the form of a seal or a polar bear. A bear attacher of Thule culture was seen in the Nukleet site (Figure 90) and a seal attacher of Punuk culture was collected by Geist from the the Ievoghiyoq site on St. Lawrence Island (Figure 67-4). These figurines seem to bear the same symbolic meanings as those in earlier periods. According to an analysis of ethnological knowledge, Crowell suggests that such sculptures "have served as hunting charms" (Crowell 2009: 222).

The bear carving was a common piece attached to a hunting helmet (Figure 109). The OBS bear figure in Collins' report (1937: 49-50) quite resembled the ethnographic bear on Yup'ik hunting hat. The hunting helmets sometimes were ornamented with walrus figures instead of bear images on the front section between the two bird pieces. A Yup'ik elder, Wassilie Berlin commented on a hunting visor among Jacobsen's collection at The Ethnologisches Museum Berlin, "Obviously a man from the coast owned this

since it is decorated with walrus designs. When shamans performed rituals wearing these helmets, they did it to help the hunters who would be going out to hunt on the ocean in the coming season. These carved walrus were what they wanted...to be available to the hunters when they hunted. These look like seagull beaks since seagulls are also ocean creatures” (Fienup-Riordan 2005: 207). A walrus figure from the Kukulik site (Figure 82-1), possibly of Thule period, has a flat base, suggesting that it may be used as a piece attached on a hunting hat. Such walrus figures with a flat base were also found in the Nukleet site (Figure 91-4).

Bear and seal carvings were found in both houses and graves at the Ipiutak site. Seals usually had a slot in the throat for suspension or lashing and bears also had slots on each of their flanks, suggesting they are pieces to be attached to other implements. A striking feature is that all these carvings are incised with skeleton designs which resemble the Scytho-Siberian animal style (Figure 99). Such skeleton motifs frequently occurred on Siberian shamans’ dresses. Because of this, Larsen and Rainey suggest that the Ipiutak bear and seal figures might represent guardian spirits of a shaman or an important clan member (Larsen & Rainey 1948: 125-127).

These animal figures were not only used to decorate hunting implements, but were also common motifs to ornament women’s working tools such as ulu handles and needle cases. OBS ulu handles were often carved in bear or seal shapes. An ulu with an ivory handle was excavated from Burial 313 at Ekven cemetery (Figure 51-4). It was probably used as a woman’s sewing implement. The ivory handle is carved as a seal and there is a ball in the mouth. Arutiunov refers it to a Northwest Coast Indian myth about a raven who stole the sun with its beak. However, it may more likely represent bubbles referring to the souls of seals which are often seen on Yup’ik masks (Arutiunov 2009: 127). A needle case from the Kukulik site was originally shaped with twin seal heads but one head is missing (Figure 67-2). It is incised with a typical Punuk decorative design composed of encircling lines with ticking marks. Although these implements were not hunting tools, they were used to process sea animal materials such as cleaning skin or

sewing parka. The figures on women's working tools thus served as charms as those ornamented on hunting implements.



1



2

**Figure 126. Ulu of OBS culture.** 1. From Camp Collier, St. Lawrence Island; 13.0 cm length, after Bronshtein 2009: 150, Fig. 13. 2. Anchorage Museum at Rasmuson Center 1972.005.111a & b, 18.0 cm length, after Crowell 2009: 215, Fig. 11.

An ivory ulu handle collected from St. Lawrence Island is carved into a bear image with OBS curvilinear design (Figure 126-1). Like the bear figure in Collins' report (1937: 49-50), this bear carving also has an elongated neck. A needle case from the Nukleet site is ornamented with two carved polar bear heads on its two narrow sides

(Figure 91-1). An OBS ulu with ivory handle in the form of a bear is housed in Anchorage Museum at Rasmuson Center. The handle has a linked piece which depicts a second bear's head (Figure 126-2). The Yup'ik scholar Vera Oovi Kaneshiro and artist Susie Silook examined this artifact in the museum and proposed that the ulu handle served as a good luck charm. Kaneshiro also mentioned that such carving was usually made to celebrate the hunter's killing an animal, and the new made implement would be owned by the hunter's wife (Crowell 2009: 214).

Seals and polar bears were respected animals among Eskimos. Seals were seen as human beings who were living beneath the ocean (Crowell 2009: 219). Eskimos still keep the tradition of offering fresh water to the killed seal even today. This ritual offering was usually made by the young son of the hunter, and symbolized that the child was willing to make friends with the seal's spirit (Arutiunov & Sergeev 2006[1975]: 122). In Eskimo theory, all killed sea animals were thirsty for fresh water. Offering fresh water to them was to express human respect to the spirits of the game. In Tigara village at Point Hope, after a seal was killed and dragged home, fresh water was offered by the wife, daughter or young brother of the hunter (Rainey 1947: 254). The northern Alaskan Eskimos believed that the spirits of the killed seals would only return to the hunters if rightly treated. In the north, the seals were not only given fresh water, but were also offered mittens to be put on their flippers. It was supposed that when the spirit of the seal returned in the sea, it might tell other seals: "Those people gave me water to drink and gave me mittens; they have those things there for you too" (Spencer 1959: 274). The central part of the Bladder Festival among Yup'ik people was to use songs and dances to amuse the seals' spirits in the hung bladders (Fienup-Riordan 1988: 267-268; Fitzhugh & Kaplan 1982: 206-210; Hawkes 1914: 26-28; Lantis 1947: 53-60).

Polar bears, like other sea mammals, were also viewed as human among Eskimos. As Yup'ik artist Susie Silook has commented, "They said that when they cut up a polar bear, it's just like a man on the inside. The bones and everything. They respect it because it's a hunter just like we are, you know. That's why it's so honored" (Crowell 2009: 212). Actually, the flesh of polar bears was not favorite food for Eskimos. In the old days,

before white traders' coming, the killing of a polar bear was for a ritual and spiritual purposes. On St. Lawrence Island, only one or two bears were killed each year in a village. A ceremony was held after a bear was killed and the storytelling and singing usually lasted five days to honor the soul of the dead bear. The head of the bear was placed on a wooden trencher behind the seal-oil lamp because this corner was believed to be the most honored space in the room. On the fifth day, people threw bits of cooked meat into the air as sacrifice to the high god and also into the fire as offerings to the spirits of the ancestors. At the close of the rite, the skull of the animal was usually placed among the graves of clan ancestors (Hughes 1960: 123-124).



**Figure 127. Carvings of birds from Kukulik site.** UAMN collection. 1-1935-4932, the first artifact (from left) in the upper line, 4.3 cm length. Photograph by Feng Qu.

Animal figures as hunting amulets and charms also included birds. Two OBS ivory birds were found at the Kukulik site (Figure 47). Such carvings of small birds were largely used by Eskimo children as gaming pieces (Jolles & Dyachkova 2009). The late deposit (Thule or historical period) of the Kukulik site also produced a large numbers of small bird effigies and they were possibly used for a children's game (Figure 127).

However, one of the OBS bird figures has a large transverse hole through the back (Figure 47-1) and the other bird has an eye hole in the flat base (Figure 47-2). These holes were apparently used for lashing or joining with other implements. For this reason, Geist and Rainey have identified them to be buttons or fasteners unlike those modern gaming pieces (1936: 214, 221-222). A bird figure ornamented with Punuk design, which was larger than other common bird figures, was found at the base of the Kukulik midden. Its big size indicates that it was not likely made for the children's game. These bird figures of OBS and Punuk cultures were more likely charms fastened to Kayaks (also see Fitzhugh & Kaplan 1982: 246).

When Yupik hunters on St. Lawrence Island took part in sea hunting, they were required to wear a charm belt which was attached with many small animal figures. The charm belt collected by Geist on St. Lawrence Island are adorned with many colorful glass beads, harpoon heads, a human face, and many carvings of animals such as bird, whale, bear, walrus, wolf, and fox (see Jonaitis 1998: 166).

Fitzhugh and Kaplan have rightly pointed out that before an Eskimo hunter set out hunting, he not only needed to prepare hunting tools such as ice picks, harpoons, lines, and knives, but also needed to be equipped spiritually "for encounters with potentially unfriendly spirits" (1982: 78-79). Therefore,

the hunter carries protective fetishes in pouches hung around his neck or sewn to his clothing. He may also carry one or more hunting charms—perhaps a seal's tooth or raven's beak—one to assist him in finding game and another to guide his harpoon. Symbolism extends also to the implements themselves. His harpoon may be decorated with an engraving of a wolf and have an ivory finger rest carved as a seal, walrus, or polar bear's head. Line fasteners may carry representations of people or animals, or simply of geometric designs. His drag handle may be shaped as a seal, polar bear, or a ferocious wolf spirit with a laming pyrite eyes. His antler harpoon heads have double- and triple-spurred bases resembling tucked bird plumage, and their elegant fine-line incision and inlaid plugs appear as stylized faces whose

zoomorphic roots have been long lost. A man's seal scratcher may be made with the claws of the seal and may also have carvings of seals set into its "palm" or engraved on its handle. This repetitive use of imagery reinforces the "sealness" of the implement, making it more effective at fooling the sleeping animal, as well as being visually pleasing and expressing the creativity of the craftsman. (p. 79)



1



2

**Figure 128. Harpoon socket pieces of OBS culture.** 1. UA66-002-0089, UAMN collection, provenance unknown, 11.1 cm length, photograph by Feng Qu 2. Princeton University Art Museum 1998-482, 14.6 cm length, after Arutiunov 2009: 56, Fig. 6.



Many OBS hunting implements, such as socket pieces, were carved as a bear-like or wolf-like image. The most striking feature of such predator images was the toothy mouth. An ivory predator head was found in the Okvik site (Figure 24-5). The slot under the animal's neck and the groove encircling the base attests that it was a piece attached or slashed to other implement. The whole piece is decorated with Okvik line designs (Jonaities 1998: 16; Rainey 1941a: 518-519). UAMN specimen UA66-002-0089 (Figure 128-1) is an ivory object of OBS culture collected by Geist but its provenance is missing. It is carved as a bear-like or wolf-like predator with paired, large, staring eyes and toothy mouth. Its carving style and form recall an Okvik socket piece collected from St. Lawrence Island and now housed in Princeton University Art Museum (Figure 128-2).



**Figure 129. Harpoon socket piece and barbed point from the Yukon River mouth.** Collection of The Ethnologisches Museum Berlin, IVA4576, after Fienup-Riordan 2005: 43, Fig. 1.5.

Such socket pieces carved as predators with tooth patterns were still used by historic Yup'ik people (Figure 129). Some wolf-like figures, collected by Nelson from Lower Kuskokwim, have green-pigmented eyes and grip harpoons between their ferocious red teeth (Fitzhugh & Kaplan 1982: 69). These images were hunters' helping spirits with the predatory power to ensure success in hunting (Crowell 2009: 217;

Fitzhugh 2009a: 172). Different from the animal images such as seal, whale, and walrus, which were used to please the spirits of these prey, these predators (including bear) were not the hunters' prey but were the predatory spirits that the hunters rely on to obtain magical power when hunting (Kaplan et al. 1984: 21). The Yup'ik elder Wassilie Berlin examined such socket pieces of Jacobsen's collection at The Ethnologisches Museum Berlin and claimed these predatory images were "powerful amulets that shamans provided their clients in the past" (Fienup-Riordan 2005: 85).



**Figure 130. Whale-tail ornament of Punuk culture.** UAMN collection. 1. UA64-021-0508, from unknown provenance on ST. Lawrence Island, 15.5 cm length. 2. 1-1935-8996, from Gambell, 4.3 cm length. Photograph by Feng Qu.

A new art form — the whale-tail ornament — was popularized during Punuk period. These ornaments were usually decorated with designs composed of curved and straight lines with concentric circles or small punctures. UAMN specimen 1053-0002 (Figure 68-2) is a knife handle in this shape, whereas 1-1935-8996 is a small whale-tail ornament (Figure 130-2). The most common whale-tail object usually had two lashing holes such as 1-1933-8576 (Figure 68-1) and UA64-021-0508 (Figure 130-1). Crowell suggests that such pieces are ornaments attached to an item used in whaling rituals, “perhaps a water vessel to provide a harvested whale’s spirit its first drink of fresh water” (2009: 210). The popularity of whale images might be associated with the growth of whaling activities during the Punuk period.

Type A-2, the half human and half animal images, were frequently seen on Okvik and OBS ivory implements. The common motifs included whale-human, walrus-human, bear-human, and bird-human.

The earliest whale-human image was found in Okvik culture. The whale carving had a slashing hole for suspension in the tail end (Figure 24-4). The whale head was clearly indicated with eyes, nostril and mouth. A human face with eyes, nose, and mouth is engraved on the whale’s forehead. Such whale/human imagery was also used by historical Inupiaq people. In 1912, an elementary school teacher William B. Van Valin and his students found a whaling outfit from a cache on Sledge Island located off the south coast of Seward Peninsula. The outfit includes weapons, utensils, and a wooden box containing amulets and charms. These artifacts eventually were deposited at the University Museum, University of Pennsylvania. Van Valin’s work with the former Sledge Islanders has revealed that the outfit was actually owned by a very aged shaman who eventually disappeared on a trip. Before the collection was passed to the shaman, it was owned by at least one whaling captain (*umialik*). Two nearly identical wooden bowhead whale/human figurines, possibly magical floats, are included in the Sledge Island collection. They have a whale body and a human face. The human face is indicated with nose and quartz crystal eyes (Kaplan et al. 1984; Linn & Lee 1999). UAMN has

collected an identical figurine also originally from the Sledge Island (Figure 131). This figure has whale's nostrils indicated on the back of the human head.



**Figure 131. Wood whale/human figure from Sledge Island.** UAMN collection. UA90-001-0031, 33.5 cm length. Photo by Feng Qu.

All these three human figures manifest a female identity. In Inupiaq religion, the spirit (*inua*) of a bowhead whale was a young woman who resided in the whale's head. In some rituals, people released the spirits of the captured whales to return to the sea, and the spirits would seek an unborn whale's body to inhabit. When the killed whale was brought to the seashore, the hunting captain's wife would offer fresh water to the whale,

showing respect. It is supposed that the spirit of a whale which was treated well would return to the hunters in the future (Kaplan et al. 1984). Inupiaq people believed that the quartz crystal had magical power so that the figure's eyes made with this material "helped hunters locate whales and compelled the sea mammals to come within striking distance of hunters" (Kaplan & Barsness 1986: 142).

The Okvik carving of human and whale transformation possibly represented the spirit of the whale, and was used as an amulet for hunting success. However, some archaeologists such as Arutiunov and Sergeev argue that the images of half animal and half human were often used to depict folklore and myths (2006[1975]: 188). A legend about a whale-child, which was popular along the coast of the Chukchi Sea, has been cited by Arutiunov and Sergeev (2006[1975]).

The whale-child story has several variants. According to an elder living in Uelen village, the story originally happened in the village of Nunak. A man who transformed from a whale became a woman's guest and the woman eventually gave birth to a little whale. When the child grew up, he was brought to the sea by villagers. A thong was tied to his neck as a mark to avoid his being killed by chance at the time of sea hunting. The whale-child often drove other whales to the village. However, the people living in the neighboring village finally killed him because of their jealousy (Dolitsky 2000: 135).

A carving of bear-human transformation is represented by a pottery paddle found in a grave at the Ekven cemetery (Figure 50). The ivory paddle is carved in the shape of a polar bear and an anthropomorphic figure and second human face are engraved on the bear's back. The outstretched bear head and neck serve as the paddle's handle (Arutiunov & Sergeev 2006[1975]: 145). While Crowell maintains that the carving "appears to represent shamanic flight involving a human-bear transformation figure" (2009: 215), Arutiunov and Sergeev argue that the image actually recorded the tribe's legend and illustrated the speech of a storyteller (2006[1975]: 145).

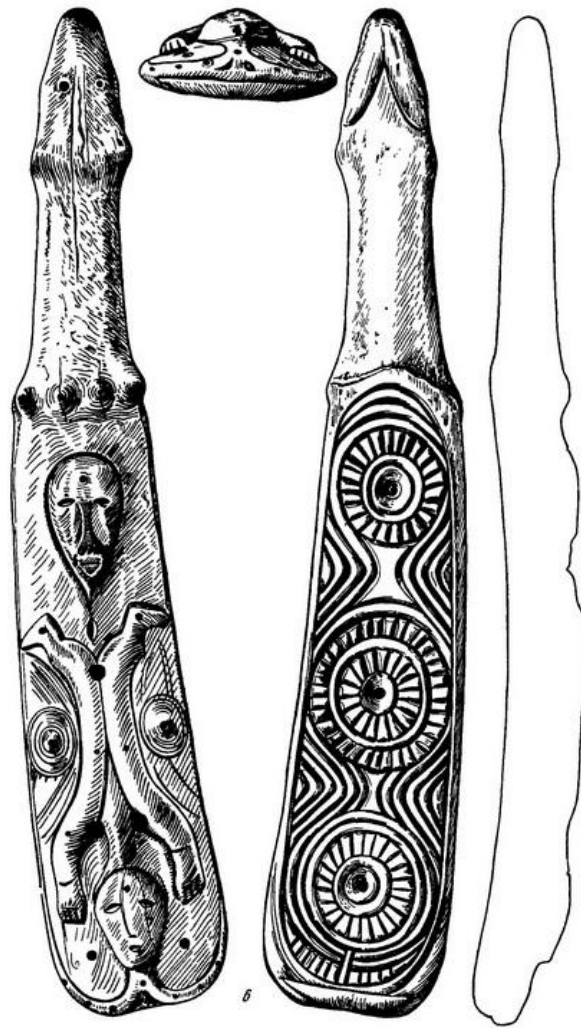
This bear-human image recalls the famous human figure, Okvik Madonna" (Figure 23-2). After an examination of the artifact, Collins (1969) has identified that the little figure clasped by the woman is a four-legged animal rather than a human infant and

argues that this little animal seems to represent a bear-child and illustrates an Eskimo legend. The story, cited by Collins, was told by a young Norton Sound Eskimo. It refers to two abandoned villages on Cape Denbigh – Nukleet and Iyatayet – which are famous because of Giddings' archaeological excavation on them. The story holds that a Nukleet woman married a bear and gave birth to a baby. One day, the bear baby ate the woman's breasts while she nursed him so that all villagers fled in horror from Nukleet and built a new village Iyatayut. In terms of the story, Collins has given an interpretation that the carving depicts the episode in which the child monster ate his mother's breast as he was nursed.

Perhaps the bear-human image on the pottery paddle expressed a similar mythological concept. From the drawing illustrated in Arutiunov and Sergeev's volume (2006[1975]: 143) (Figure 132), we may clearly identify that the human figure in the middle of the object has breasts represented by two large concentric circles encircling bossed prominences. The figure's legs are bent, resembling the position for giving birth to a baby. The second human face is placed under the woman's torso and is semi-surrounded by her legs, perhaps representing that this second person has been birthed by the first person. The second face has an intentional link with the bear, implying this masked human symbolizes the spirit of the bear, namely that the bear image actually represents the woman's monster child.

A walrus-woman hook, found from Burial 154 at Ekven cemetery (Figure 51-1), might describe a Chukchi or a Siberian Yupik legend about the Mother of Walrus. The carving shows a female walrus and her baby walrus on one half and the other half depicts a woman. The woman has pendulous breasts and a pregnant belly. The woman's abdomen gradually transforms into the head of the walrus, and the woman's breasts can also be viewed as the eyes of a baby walrus in the other perspective. In the legend, the Mother of Walrus, who was represented as a walrus or as an old woman, was called Myghym Agna. She lived on the bottom of the ocean and controlled all sea animals (Arutiunov & Sergeev 2006[1975]: 186; Crowell 2009: 219). Such walrus-woman imagery is also represented by a toggle excavated from Burial 309, Ekven cemetery

(Figure 49-3). This ivory object is carved with two walrus and two woman faces. Arutiunov suggests that the human faces may reveal the human-like spirit of the sea animal, namely the *inuas* of the walruses (Arutiunov 2009: 128).



**Figure 132. Ivory pottery paddle.** Collection of the Peter the Great Museum of Anthropology and Ethnography, Russian Academy of Sciences, St. Petersburg, Catalog No. 6508-547, from Burial 45, Ekven cemetery, 32.8 cm length. After Arutiunov & Sergeev 2006[1975]: 143, Fig. 65-1.

The images of raven-human transformation often shaped OBS spoon handles. An OBS spoon made of bird breastbone with an ivory handle was found in Burial 302 at Ekven cemetery (Figure 49-2). The upper part of the handle is carved as a human figure, and the lower part is a raven with eyes and a sharp beak. A pairs of concentric circles are decorated on the human torso. They might resemble female breasts but might have nothing to do with sex, instead representing spiritual eyes. The other spoon handle (Figure 49-4) is carved as a raven's head ornamented with a small humanoid image on the forehead (Arutiunov 2009). These raven-human figures might denote the famous myth of the raven among Bering Strait Eskimos. In Eskimo mythology, the Raven-Man was the creator of the human world. He had a magic beak mask. If he wore it he would be a raven, but if he pushed up the beak he would transform into a man. He found the first man from a beach-pea and took him to the ground. After that he used clay to create the land animals, such as mountain sheep and wild reindeer; the sea animals, such as seals and walrus; fish; and insects, such as flies and mosquitoes. He even created a young woman for the man as his wife so that he had numerous offspring. The Raven-Man also taught human beings how to hunt seals, how to use seal skin to make snares for reindeer hunting, how to make bows and arrows, spears, nets, and other hunting implements, how to make fire with the fire drill, how to dry salmon for winter use, and how to build houses. The Raven had power to take the first man to the bottom of the sea, to transform the man into a bear, to destroy the corrupted humans, and to take away the sun. Therefore, the Raven creator was worshipped by humans and was offered food and furs (Nelson 1900: 452-462).

According to Arutiunov, the abovementioned spoons ornamented in such a manner were used as ritual implements. Northeastern Siberian peoples used such ritual spoons to offer the hunted animals' blood to the gods (2009; 130). In this way, these spoons with raven-human images were made and used in honor of the Raven creator and might also have been used to offer animal's blood to the deity of the Raven-Man.

The design of a beaked bird with a small human effigy is also seen on an OBS counterweight found from the Burial 285B at Ekven cemetery (Figure 44). The bird with



a large beak, perhaps a raven, is placed above a crouching human. However, if viewed from the other direction, it is an image of a predator with large eyes and a toothy mouth, like those predators on some socket pieces. The beast's ears transform into double bears carved on the top of the object's wings. The tiny human figure possibly represented the *inuas* of both the raven and the predator. The poly-iconic image was likely created to enhance the hunting power.



1



2

**Figure 133. Ivory whales of Punuk culture from Punuk site. UAMN collection. 1. 4-1934-1090, 12.2 cm length. 2. 4-1934-1092, 10.6 cm length. Photograph by Feng Qu.**

Different from A Type, Type B animal carvings were not used as implements or ornamental parts on implements. They were freestanding sculptures. There was little evidence of Type B carvings found in Okvik and OBS culture, and they mainly occurred during Punuk and later periods.

UAMN specimens 4-1934-1090 and 4-1934-1092 (Figure 133) are two whale effigies excavated from the Punuk site on Punuk Islands by Geist in 1934. Although they do not bear incised designs, they are likely attributed to Punuk culture. Both of them are exceeding 10 cm in length.



1



2.

**Figure 134. Ivory carvings from Kukulik site.** UAMN collection. 1. 1-1935-8260, bear, 13.5 cm length. 2. 1-1935-4968, bird, 10.8 cm length. Photograph by Feng Qu.

The freestanding animal carvings were largely used in Thule and historical Eskimo cultures. A large numbers of carvings made of ivory and wood were found from the late deposit of Kukulik site. UAMN specimen 1-1935-8260 (Figure 134-1) is a bear carving and 1-1935-4968 is a bird (Figure 134-2). Both ivory carvings have a relatively larger size; the length of the bear is 13.5 cm and the bird has a length 10.8 cm. The bird carving is much larger than the small bird effigies as game pieces. There are another group of ivory animal carvings which are featured of a relatively small size usually ranging from 5 cm to 7 cm in length. These small images are typically land animals such as as bears, wolves, dogs, and foxes (Figure 84).

The wood animal carvings are relatively cruder than the ivory works. They include various sizes. The relatively larger effigies include a bear and a seal as illustrated in Figure 83. UAMN specimens 5-1934-1743 and 5-1934-1741 are a wooden wolf and a bear excavated from the historical deposit of the Kukulik site. Both carvings are 8.2 cm long.

Ethnographic data shows that the freestanding animal carvings were frequently used in Eskimo ceremonies in the Bering Strait region. Lantis has documented the Messenger Feast on Nunivak Island. During the festival, a few men of the hosting village brought in large flat wooden frames in the community house where the guests were served. Each frame contained wooden carvings of seals, caribous, birds, kayaks and kayak men, and other objects. In Lantis' statement, "The figures on the frame commemorated spectacular hunting achievements of the ancestors of the family. Sticking into the animals were highly conventionalized models of harpoons or arrows. Everyone knew the meaning and the legend of each figure. Although they were propriety, they were not secret" (Lantis 1946: 191-192).

During Yup'ik winter ceremonies, large wooden rings, connected to each other by wooden rods, were suspended from the ceiling of the communal house to represent the leveled universe. This ornament was called the *ellanguaq*, and it was also attached with wooden figures of human, animals, and birds (Fienup-Riordan 1996: 125-132). In 1842, a Russian traveler Lieutenant Zagoskin witnessed the Bladder Festival at a Yukon village

and observed several wooden figures, including an owl, a human head, a seagull, and two ptarmigans were suspended with the *ellanguaq* in a communal house. All these figures had a clever mechanical function. People manipulated a string to make the owl flap its wings, to direct the seagull pecking the floor, and to let the ptarmigans kiss each other (Michael 1967: 129). According to Yup'ik elder Jasper Louis (February 25, 1994), these figures were performed in order to show their ancestors' actions to other people (Fiehup-Riordan 1996: 127).

Rainey has also noted that the animal figures were used in ceremonies by Eskimos according to the accounts of several informants from Tigara village at Point hope<sup>15</sup>. During the four days of sitting ceremony, the secret figures were suspended from the ceiling of the men's houses on thongs. The secret figures are broken into two groups: *qologogoloqs* and *pogoks*. *Qologogoloqs* were a group of objects, including masks, boat models, and human and animal figures, which were kept permanently in the men's house. The most important *qologogoloqs* not only included a wooden mask, two small model umiaks with crews, and hunting gear, and also included animal carvings such as whale and bird. All figures were manipulated by strings to produce a puppet-like performance. The umiaks were placed in a manner to attack the whale and the bird seemed to peck away some blubber. Tigara people used such a performance to memorize the hunting events of the past. *Pogoks* were wooden human and animal figures made each year at the time of the sitting ceremony. The animal figures included seals, polar bears, caribou, whales, walrus, birds, and mythical animals, and they usually represented ancestors' hunting achievements. For example, an old hunter once killed six wolverines in one day. His son thus carved six small wooden figures as the year's *pogoks* during the sitting ceremony (Rainey 1947: 247-248).

The last day of the sitting ceremony was called "calling day and killing day." At that day, the singers called out the names of the umiak captains (*umeliks*) and other hunters in the men's house. When a person's name was called, he would state a wish such

---

<sup>15</sup> Rainey's field work in Tigara was conducted in 1940. However, the traditional ceremonies held in the *qalqi* have not been practiced since about 1910 (Rainey 1947).

as “I want to kill a whale right away!” or “I want to have a long life.” The “killing” means the burning of the *pogoks*. All human and animal figures as *pogoks* were burned at a special place near the men’s house. Before the “killing,” the old men told the stories of each figure, accompanied by drumming. Meanwhile, hunters one by one used models of weapons to spear the animal figures (252).

The animal carvings of Type B were most likely used in the ceremonies. Some were regarded as props to tell hunting stories of ancestors in festivals such as in the Messenger Feast. The small ivory animals from the Kukulik site (Figure 84) might be such objects to display the events of the past. Some were possibly used as some ritual-used objects like *qologogoloqs* and *pogoks*. The beautifully-carved whale figures from the Punuk site, illustrated in Figure 134, might play a role like *qologogoloqs* in whaling ceremonies each year and might be kept in a men’s house permanently. Many wooden animals found from the Kukulik site such as the wolf and the bear illustrated in Figure 135 seemed to be deliberately damaged. A seal carving survived the fire with the burn damage (Figure 83).



**Figure 135. Wood animal figures from Kukulik site.** UAMN collection. From above to below: 5-1934-1743, wolf, 8.2 cm length; 5-1934-1741, bear, 8.2 cm length. Photograph by Feng Qu.

## Human Figures

Human figurines of ivory, wood, or bone have been largely found in the Northern Maritime cultures in the Bering Strait region. This artistic tradition lasted from Okvik and OBS periods, through Punk and Thule periods, until the historical period. Okvik human figurines of ivory are best known for the large number and a unique artistic style which was characterized by the stylized form of the head and the face. The head of Okvik human figurines was usually pointed at the top. The facial feature was characterized by curved eyebrows, elongated noses, and small mouths. The face was in the shape of an oval with a narrow, pointed chin. The torso was usually made in shape of a rectangular block without arms and legs. Sometimes the arms were only indicated with nubs. Most human figurines were engraved with geometric designs on torsos, which might represent tattoo marks or clothing (Collins 1977: 3-5; Rainey 1941a; Ray 1961: 14).

The facial features of OBS human figures changed into a new style which was characterized by broad, flat noses, and slit like eyes (Linn & Lee 1999: 4; Wardwell 1986: 65-79). UAMN specimens 1931-NN-36 and 1-1931-0961 (Figure 52) are human heads of ivory excavated from the Kukulik site, and both of them are indicated with slit-like eyes. However, a wooden human mask with large, open eyes was found at Ekven cemetery, representing a special case (Arutiunov & Sergeev 2006[1975]: 186). The arms, legs, and body features of OBS figures were usually accurately depicted (Figure 53), and their bodies were normally engraved with OBS curvilinear designs. The Punuk human figurines were similar to those of OBS cultures but the heads were broader and rounder. It was common for a Punuk human face of ivory to be incised with tattoo marks (Krutak 2009; Linn & Lee 1999: 4; Wardwell 1986: 96-97).

The wooden human figurines are rarely found in Okvik, OBS, and Punuk cultures, perhaps because of the bad condition of preservation in the ground. A wooden human

figure, found from an OBS grave at Ekven cemetery (see Arutiunov & Sergeev 2006[1975]), suggests that human figurines made of wood were also prevailing in early periods of Northern Maritime cultures. Giddings' excavation of the Nukleet site, however, produced many well-preserved wooden human figurines of Thule culture (Figure 92). Some of them are carefully indicated with facial features but others have no facial features indicated. Many dolls are indicated with breasts and short trunks, suggesting a female character. Some figurines are badly damaged (see Giddings 1964: 86-89). The late deposit of the Kukulik site on St. Lawrence Island (Thule and historical periods) also yielded numerous wooden human figurines, as well as ivory human dolls. Most of them, including both ivory and human materials, have a simplified and stylized manner. They consist of only heads and torsos but there are no facial features, arms, and legs indicated (Figure 81).

Ethnographic information reveals that Eskimo human figurines served multiple purposes. Generally, they were used as the shaman's devices, charms and amulets, props for a storyteller in ritual and ceremony, or as children's play dolls.

It was common for historical Eskimos to use ivory or wood figurines for shamanic purposes in the Bering Strait region. Geist once visited a native doll carver Nemayaq at Camp Collier on St. Lawrence Island. As he has noted, "Here lived Numaiyuk, a brother of the strongest shaman on the Island, and carver of the many dolls, idols, fetishes, and ornamented household utensils fashioned from driftwood found in many of the island homes" (Geist & Rainey 1936: 34). Nemayaq's granddaughter, also a doll carver, has recalled that the themes of her grandfather's carvings include "women giving birth, carrying children, and feeding them, as well as many other poses" (Fair 1982: 52). Some of them might serve to cure infertility. According to Geist's notes, on St. Lawrence Island, such figurines were carved by the shamans "for use as charms by barren women who wished to have children" (VanStone 1953: 20).

Jacobsen collected a group of antler and ivory dolls from the lower Yukon, Cape Vancouver, and the Kuskokwim. One of the figurines tied with caribou sinew was noted to be a shaman's doll. Jacobsen wrote that it might be made by a shaman to be used as a

“protecting spirit” (Fienup-Riordan 2005: 188). When examining this artifact at The Ethnologisches Museum Berlin, the Yup’ik elder Paul John agreed with Jacobsen and was certain that the ivory figurine was an *iinrut* (amulet) rather than a play doll:

Some were probably *iinrut* and some were probably *inuguat* (toy dolls). As I look at these, I know some are play dolls and some aren’t. The play dolls had clothing and were flexible enough to be set in a sitting position....When children played, they did not keep their dolls in a standing position but sat them down, too. This dressed figure is not a toy doll because it is inflexible and its garment has no sleeves. It could be an *iinruq*. (Fienup-Riordan 2005: 188)

Wassilie Berlin identified most of these figurines in Jacobsen’s collection as *iinrut*. He said:

These are what we called *uyat* (human figures). The parkas and bodies of the *uyat* were made from bird-neck skins. People in the upper region of the Kuskokwim River put figurines they called *yugat* (dolls) out in the wilderness. But the figure they call *uyat*...were used as *iinrut*. I have heard that these figurines made whistling sound. When a person heard a whistling sound, he’d know that it was the sound of an *uya*. (Fienup-Riordan 2005: 189)

Two large, clothed wooden dolls in Jacobsen’s collection were also identified as house guardians. They comprise a female figure with nose beads and a male with bead labrets. Jacobsen has noted that such figures were suspended or placed at the entrance of the house for providing spiritual protection for both the building and the people. They perhaps represented the deceased shamans to protect his or her living descendents (Fienup-Riordan 2005: 189).

The wooden human figures as house or personal guardians were also used by Chukchi and Koryak peoples (Bogoras 1904-1909; Jochelson 1908). Bogoras witnessed



that two human faces were placed on the top of one of the whalebone uprights near the entrance in a Chukchi house. They were called “guardians” by the house owner. The owner also offered tallow and tobacco to the human guardians (Bogoras 1904-1909: 342). Some human figures were attached to the family charm strings of the Chukchi with the animal figures such the walrus, the polar bear, the black bear, the wolf, and the raven (344). The human figures hung on charm-string of the Maritime Chukchi were called “guardians” or “Assistants.” Some of them were thought to be an image of the Upper Being, or an image of the Sea Being (362-363).

Nelson has documented the “Doll Festival” held in the Lower Yukon. During the festival, a wooden doll or image of a human being was suspended in the men’s house. After the festival, the human figure was wrapped in birch-bark and hung in a tree at a concealed place by the shaman until the coming of the next year’s festival. The place where the doll was placed was only known by the shaman. During the days between two festivals, the shaman would sometimes go to the doll to ask the image to predict the success of the season’s hunting and fishing. Fragments of deer fat and dried fish were brought to the doll and were wrapped with the doll as an offering. It seems obvious that such human figurines are shamans’ helping spirits (Nelson 1900: 494). Geist has also noted that some human figurines used for religious purposes were often fed with blubbers and meat and were burned after the ceremony (Geist & Rainey 1936: 123). Geist once spoke of a wooden human face, collected from St. Lawrence Island, to VanStone that the carving was originally hung on the wall of a house and “was fed blubbers during the whale hunting season to insure a successful hunt” (VanStone 1953: 20).

Ray found that the heads of the play dolls on St. Lawrence Island were usually broken off when a child died (1967: 10). Linn and Lee have added that when a shaman died, the heads of his or her dolls were also broken off. The act of breaking the head off a deceased child’s doll might symbolically release the child’s spirit to travel to the spiritual world. However, the same action to a dead shaman’s doll might prevent the helping spirit from coming back to perform evil (1999: 15).

The broken heads of human figurines and the figurines with missing heads have largely been found in archaeological sites through all periods of the Northern Maritime cultures in the Bering Strait region. It is difficult to differentiate between shaman's figures and children's play toys. However, a contextual examination helps to identify the functions of some figurines.

An ivory woman of Punuk culture with a missing head was found from the Punuk site on Punuk Islands (Figure 65-1). The pendulous breasts, bloated stomach, and female sexual organ are naturally indicated, depicting an image of a pregnant woman. Such images are likely shamans' devices thought of as charms to help a barren woman to have a baby. When the shaman died, his devices were destroyed. UAMN specimen UA74-066-0006 (Figure 136) is a human face in the form of a phallus. The eyebrow, nose, mouth, and ears are indicated (also see Rainey 1941a: 524-525). This figure was possibly also used as the shaman's charm to cure infertility.



**Figure 136. Ivory human figure from Okvik site.** UAMN collection. UA74-066-0006, 10.8 cm length. Photograph by Brian Allen.

An ivory human figure of Punuk culture from St. Lawrence Island is carved with a pronounced phallus and emerging breasts (Figure 65-2). Krutak suggests that this figure represented a transgender male shaman (2009: 193). The shamanic transformation of men and women was still seen in historical Chukchi culture. Under the command of the spirits (*ke'let*) the transgender took place and the Chukchi shaman underwent a change of sex in part or even completely. The transgendered shaman was called “soft man being,” because the male shaman transformed into a being of a softer sex. His voice, faculties and strength of his body, and his psychic character changed from the male to the female mode (Bogoras 1904-1909: 448-457). In Bogoras’ speaking, the male shaman “becomes a woman with the appearance of a man” (451). This Punuk figure could represent the shaman’s spirit which helped him to change sex. The missing head might be broken off from the figure at the death of the shaman.

An ivory human face of OBS culture excavated from the Kukulik site has a groove surrounding the edge (Figure 52-1), suggesting that it might be used in connection with other implements or the boat as a hunting charm, or to hang on a wall in the winter house as a house guardian. An ivory human face from the Ekven cemetery with three holes for lashing (Figure 51-2), could also be used for such a spiritual purpose.

Two human-shaped combs and one human-shaped fork of Thule culture were excavated from the Nukleet site by Giddings (1964). One comb is made of antler and has etched facial features (Figure 93-1). Simple arms are indicated with knobs. The other comb is made of wood and has a featureless head (Figure 93-2). The wooden fork is carved as a slender human figure (Figure 93-3). Its long and thin legs were used as a fork. Eyes and mouth are clearly indicated. Such human-formed combs or forks can be traced back in OBS culture (Arutiunov & Sergeev 2006[1975]). Arutiunov and Sergeev point out that combs in human forms were usually used by Eskimos for fortune divining until the beginning of the twentieth century: “If the hunter was away from the village for a very long time or was late returning from a hunt on the ice, the woman combed some grass thoroughly and placed it in new boots. In the evening they hung the boots in the

corner of the house, and in the morning they looked to see how the inner sole laid. If the inner sole had remained unchanged the hunter was safe; if the shape had changed the relatives knew that something had happened to the man” (2006[1975]: 157).

Several ivory human figures of Okvik culture were used as fire drilling boards (Figure 21-2, 21-4, 22). The fire board in human form was still a popular phenomenon among Chukchi and Koryak peoples at the beginning of the twentieth century. The fire board of the Reindeer Chukchi was roughly carved into a human form and the facial feature was usually clearly indicated. The fire board was regarded as the hearth guardian while a woman was a fire keeper with the fireboard. It was often fed with tallow and marrow in ceremony. Every Chukchi family kept several new and used fire-boards as spiritual guardians to protect the family’s properties. The ancient fire boards were inherited from preceding generations. When a Chukchi boy was born and grew up to four or five years old, he would be given a fire board and a reindeer brand. Each fire board has different functions in a Chukchi family. The most ancient one was considered as the protector of the herd. Second is a protector for hunting, and the third is to protect sacrifices (Bogoras 1904-1909: 349-353). The fire board was also seen as the deity of the household fire by the Koryak family. All fire-making implements, such as fire-board, bow, wooden drill, and stone head-piece, are treated as household guardians. The fire-board figure among Maritime Koryak was seen as the master of the underground house and the protector of sea mammal hunting. The figure was called “father” by the Maritime Koryak and was called “master of the herd” or “wooden kamak” by Reindeer Koryak (Jochelson 1908: 33-36). Fire-board was treated as one of the most important deities in Maritime Koryak’s family spring festival: The Launching of the Skin Boat. During the festival, people used the sacred fire-board to light up a sacrificial fire. The mouth of the wooden figure was greased with fat and people also used a knife to clean the figure’s eyes, and spoke to it, “Well, your eyes have become clear, the sea is open, look out” (79). The Okvik fire boards in a human form were possibly used to light up the sacrificial fire in a sea hunting ritual and were also regarded as deities which protect the sea mammal hunting.

Among Reindeer Chukchi, older fire boards were destroyed in the spring at the Ceremonial of the Antler. They were burned in the fire. The heads of the figures were often cut off and were put with charms on the charm string as family guardians (Bogoras 1904-1909: 351). All the Okvik fire boards have the missing heads. They were likely destroyed when they were abandoned. Meanwhile, there are also many doll heads to be found in the Okvik site, suggesting that some of them might be the heads broken from the fire boards and treated as hunting or family charms. However, in OBS, Punuk, and Thule cultures there are no such fire boards in the human form to be found, suggesting this old custom of Okvik culture was inherited by Siberian Chukchi and Koryak.

Human figures were also used as props in Eskimo ceremony to represent hunting stories. As abovementioned, during the Messenger Feast on Nunivak Island, the hosts brought large wooden frames, which contain wooden kayak models with human figures, as well as wooden carvings of hunting animals, in the men's house and showed them to the guests from the other villages. These human figures, kayak models, and animal figures on the frame "commemorated spectacular hunting achievements of the ancestors of the family" (Lantis 1946: 192). At the close of the feast, all wooden figures were given to children as a kind of talisman.

The wooden animal and human figures used in the Whaling Feast at Tigara village in Point Hope were called *qologogoloqs* and *pogok*. They were suspended from the ceiling of the men's house during the sitting ceremony. The *qologogoloqs* included a wooden whale, a bird, and two umiak models with human figures as crews who held the paddles. These props represented some hunting events which had happened in the past. *Pogoks* included wooden figures of hunting animals, mythical animals, and human figures, which commemorated the ancestors' particular feat. These figures were carved during the days of the sitting ceremony and were burned after the celebration. Agaveksina's uncle, Asetcuk, was a shaman living about the turn of the nineteenth and twentieth century. When he once conducted a spiritual flight over Siberia, he met a flying Siberian shaman. Asetcuk then carved two wooden figurines in flying position to represent himself and his Siberian shaman friend. In Rainey's quest, Agaveksina carved

copies of the flying figures (Rainey 1947: 248; Linn & Lee 1999: 19). The two figures of the flying shamans are now housed in UAMN (Figure 114).

During the sitting ceremony at the Tigara Village, the performance of a puppet whale boat with crews was often shown to the guests. The crews are wooden figures dressed in skin parkas and seated in the umiak model and all hold small paddle models. Such umiak models were called *qopqagaiq*. While the shaman was drumming and singing, the puppet crewmen were paddling in the rhythm. Rainey specially asked an old men to make a copy of the puppet umiak model for himself. This is the UAMN specimen 1-1940-0134 (Figure 137).



**Figure 137. Umiak model from Tigara Village in Point Hope.** UAMN collection. 1-1940-0134, 84.0 cm length. Photograph by Feng Qu.

Many archaeological figurines might be clothed originally but the skin parka was easily rotted away. It is difficult to differentiate those figures used as props in ceremonies from other figurative carvings. Many wooden figurines, simply composed of the head and

the torso, were found from the late deposit (Thule and historical period) of the Kukulik site (Figure 81-7, 81-8). Some of them might be ornamented with a skin parka and four skin-made limbs as the crewmen in some hunting ceremonies. Some of the human carvings excavated from the Nukleet site were more likely used as *pogoks* (Figure 92). Several specimens seem to be deliberately destroyed (Figure 92-4, 92-5, 92-6), suggesting that they were possibly “killed” at the close of a ceremony. A specimen still remains with clear evidence of burning (Figure 92-5).



1



2

**Figure 138. Ivory models of umiak and paddle.** UAMN collection. 1. 1-1926-0890, toy umiak, Punuk or Thule culture, from St. Lawrence Island, 15.3 cm length. 2. 1-1933-8751, toy paddle, from Kukulik site, 6.2 cm length. Photograph by Feng Qu.

It is worth noting that many boat models have been found in OBS, Punuk, and Thule cultures in the Bering Strait region. An ivory kayak model of OBS culture, embossed with twin fish and a human face, was excavated from Burial 10-11 at Ekven cemetery (Arutiunov & Sergeev 2006[1975]: 121). Another similar OBS Kayak model of OBS culture, collected from Point Hope in 1907 and now housed in Pennsylvania Museum of Archaeology and Anthropology, is also carved with two human faces and twin fish. The umiak models and miniature paddles have mainly been found in Punuk and Thule culture. UAMN specimen 1-1926-0890 (Figure 138-1) is an ivory umiak model collected by Geist from an unknown site on St. Lawrence Island, possibly belonging to Punuk or Thule culture. Specimen 1-1933-8751 (Figure 138-2) is a miniature ivory paddle excavated from the Kukulik site also attributed to Punuk or Thule culture. Such ivory or wooden miniature umiaks and paddles were likely used with some human figurines in certain ceremonies to commemorate ancestors' hunting events.

The late deposit of the Kukulik site also yielded numerous miniature human carvings of ivory (Figure 81). Most figures of this type are indicated with female features. Specimen 1-1934-3971 shows a pregnant woman (Figure 85-6). Such miniature figurines seemed to be restricted to St. Lawrence Island. VanStone suggests that they might be used at "particular ceremonies in connection with whaling" (1953: 23). However, Linn and Lee argue that these figures "could have been used for any number of purposes" (1999: 37).

Play dolls were popular among indigenous peoples in the Bering Strait region. Each Chukchi girl usually had several play dolls, some in the size of a small baby. Different from Eskimo dolls, the Chukchi dolls were only made of cloth and animal fur (Bogoras 1904-1909: 276). Some of Koryak girls' dolls were made of leather and fur, and others were made of wood and were dressed in fur-made cloth (Jochelson 1908: 669). The girls' dolls were common among Yup'ik people in Southwest Alaska. They were usually made of wood, ivory, or bone. Many carvings had hard material only for the upper half of the body and their legs were merely made of skin. The dolls include both genders: male and female. The female dolls were incised with tattoo marks on face,



whereas the male figures were usually inserted with ivory pieces at the corner of the mouth as the indication of labrets. Large dolls were collected by Nelson from the area between the Yukon and Kuskokwim rivers. On Sledge Island, Nelson once witnessed two little Inupiaq girls to place their dolls standing in a semicircle in their house (Nelson 1900: 342-345; Linn & Lee 1999: 12-13). However, according to Murdoch (1892: 380), such dolls with little girls were not popular in the vicinity of Point Barrow.

It is possible for Eskimo ancestors to have used play dolls since as early as 2,000 years ago, although how to identify them from other human figures still remains problematic.

### Summary

The comparative analyses between archaeological materials and ethnographic information in this chapter reveal that while the production of some artistic designs and representational carvings were likely fostered by shamanic practices, others functioned as storytelling tools and children's play toys.

The circle-dot motif is one of the most prominent geometric forms incised on ivory, bone, or antler objects from the prehistoric to historical periods. As a shamanic metaphor, it represented spiritual eyes which were able to see the unseen world. It also symbolized the joint mark which was seen as a place for spirits to reside in. Meanwhile, a joint mark also had an ability, like the eyes, to see into other worlds. The multiple leveled circles usually represented the shamanic universe and cosmological system.

The hunting implements and working tools in animal forms were usually used as charm and amulets. Such artifacts occurred through all Northern Maritime cultures and historical Eskimo culture. These representational images mainly included polar bears, seals, bear- or wolf-like predators, and birds. Many half-animal and half-human images were represented by some ivory objects, especially during the Okvik and OBS periods. These images possibly described the ancient clan myths used by elders for story-telling. A large numbers of freestanding animal carvings were found from the Punuk and Thule

periods. These carvings were most likely used as props to memorialize the ancestors' hunting achievements and other important historical events.

Human figurines had multiple functions. Some of them were used as house or personal guardians, while others served in the telling hunting stories as props in ceremonies, or were possessed by girls as play dolls.

## **Chapter 6: Structural and Cognitive Perspectives**

Arutiunov highlights cognitive elements in exploring prehistoric Eskimo art. As he notes, “The spiritual culture of any society is a complex of information that exists in the collective living memory of the particular society. Materiality is written into the brain, and visually it can be perceived in behaviors that occur only in performance: speech, dance, ritual, work activities” (Arutiunov 2009: 133).

The prehistoric artistic production in the Bering Strait region constitutes a distinct, intricate cognitive processing system. The carved and engraved images might represent “a pictographic writing system that had an auxiliary function” (Arutiunov & Sergeev 2006[1975]: 145). This chapter attempts to offer cognitive and structural analyses of the art symbolism in the Bering Strait region. However, my perspectives do not rely on structuralist and cognitive theory, because these theories neglect the cultural and historical elements, and see material cultures as passive. More critically, structuralists and cognitive archeologists have overlooked the indigenous perspectivism. In this way, my arguments in this chapter are built on practice theory and new animism ontology, which are more suitable, in my view, to explain the variants of art productivity, cosmological structures, and relationship between humans and materials.

### **Geographical and Temporal Variants of Artistic Productivity**

Processual archaeologists have defined culture as human adaptation to their environment (Binford 1962). “The principle goal of archaeology” is to understand “the cultural change (process) in varying environmental and cultural settings” (Sabloff 2005: 164). Such a perspective suggests that “human behavior was characterized by striking uniformities that should be reflected in the archaeological record” (Trigger 1986: 10). Thus, the nature of processualism is “systems thinking,” which sees the culture as the dynamic equilibrium between sociocultural systems and environmental systems (Johnson 2010: 69). In Hodder’s comment, the processual archaeology “aimed objectively to identify

relationships between variables in cultural systems” (Hodder 1982b: 3). According to this systems thinking, processualists suggest that many common adaptive characteristics were shared by different cultures if they were generally at the same stage of development (Trigger 1986).

One problem of the processual approach is its ignorance of symbolic and ideological issues (Hodder 2000: 86). Both structural archaeology and cognitive archaeology seem intentionally to avoid such theoretical problems and center on interpretations of symbolic systems in material cultures. From the structural perspective, cultural patterns are like languages which are governed by general rules hidden inside human brains. Artifacts express human ideas in general. The key to interpreting human culture is to discover the cognitive rules of the internal mind (Johnson 2010: 187). However, Hodder and Hutson (2003) have noted that structural approaches and processual archaeology have essential similarities in their methodologies:

Indeed there are many close similarities between systems analysis and structuralism, and we shall see below that the criticisms of both run parallel. The most obvious similarity between the two methods is that both are concerned with ‘systemness.’ The emphasis is on inter-relationships between entities: the aim of both systems and structuralist analysis is to provide some organization which will allow us to fit all the parts into a coherent whole. In systems analysis analysis this structure is a flow diagram, sometimes with mathematical functions describing the relationships between the sub-systems; the system is more than, or larger than, the component parts, but it exists at the same level of analysis. Although in structuralism the structures exist at a deeper level, the parts are again linked to a whole by binary oppositions, generative rules and so on. In both systems and structuralist analysis it is the relationship between parts that is most important. (p. 45-46)

Although cognitive archaeology centers on explorations of human thought and symbolic connotation embedded in material remains (Renfrew 1994a; Renfrew & Bahn 2000), it

focuses on the examinations of “the ways in which symbols were used” rather than the studies of “the meaning or metaphysics of past symbolic systems” (Hodder & Hutson 2003: 36). When dealing with the relationship between mental constructs and material things, the method adopted by the cognitive archaeologists is still systems analysis (38). Thus, symbols in both cognitive and structural approaches are passive and stable. The historical elements, agency, and cultural particularities are neglected.

The theory of practice proposed by Bourdieu (1977) and Giddens (1979), however, has revealed that cultural particularities are determined by social conditions and historical elements rather than the general rules (Preucel 2006: 132; Hodder & Hutson 2003: 92). Bourdieu’s practice context is centered on the notion of *habitus*, which is seen as the mediation between structure and practice (Bourdieu 1977). As a term, *habitus* is defined as “a linguistic, physical and cultural competence” and as “practical logic and knowledge” rather than as “abstract sets of mechanistic rules” in the mind (91). “In and through production of practice,” *habitus* constantly relates systems of history and nature (78). *Habitus* is not only the product of history, but also produces history (82). Because *habitus* can be seen as history turned into nature, Bourdieu also defines *habitus* as “the embodied history” or “internalized” nature, which serves as an active presence of human past (1990: 56). Individual systems of dispositions play an active role. Diversity is included in homogeneity, that is to say, homology of worldview embodies the individual differences while uniting diversities of singular *habitus* into a same system (58). Based on this *habitus* concept, Giddens proposes his “duality of structure” theory, which means that “the structural properties of social systems are both the medium and outcome of the practices that constitute” social systems (1979: 69). The social structure can be understood as production of practice, but not a static concept of social action. Every moment in which action happens naturally and simultaneously, all actions coexist in historical continuity (70). In this way, the individual is creative and material culture is active in creating society and in creating “continual change” (Hodder & Hutson 2003: 94).

The Arctic adaptation plays an initial part in the formation of Eskimo symbolism in the Bering Strait region. The prehistoric and historic Eskimo cultures are characterized

by adaptations to a high latitude environment. Sea mammal hunting plays a major role in the social life of maritime Eskimo groups. They relied on wild sources consisting of sea mammals, fish, birds, and plants. These species, especially animals, provide common themes for the art symbolism in the prehistoric Bering Strait region.

However, the regional variations and periodical changes of art symbolism appear to be evident within the cultural homogeneity. For example, Ipiutak Culture was contemporary to OBS culture during the period from AD 400 to 900 (Dumond 2009; Fitzhugh 2009b). As occupants of St. Lawrence Island and Russian East Cape, OBS culture was characterized by curvilinear designs and representational carvings (Collins 1937). Neighboring OBS culture, Ipiutak occupied the coastal and interior areas from Seward Peninsula to Point Hope in northwestern Alaska. Although Ipiutak culture shows an obvious arctic adaptation like other prehistoric Eskimo cultures, it lacked many common objects used by the Northern Maritime cultures such as ground slate implements, clay lamps, and cooking pots. Differing from OBS culture, there are no double concentric circles (or ovals), which represent therianthrope heads, engraved on Ipiutak harpoon heads. Ipiutak harpoon complexes do not include the counterweight which was popular in Okvik and OBS cultures. A large number of ivory openwork carvings, which represent human or bird images, were found at the Ipiutak site. They resemble shamans' regalia attached to shamans' costumes in Siberian regions thus may reflect the influences from the Siberian shamanic cultures (Larsen & Rainey 1948: 146-161). The elaborate composite masks to form a human face with eyes, nose, mouth, and labrets (Figure 101), and the engraved plaques with a semi-human beast (Figure 97) are not seen in other Northern Maritime cultures in the Bering Strait region (Larsen & Rainey 1948: 136-138; Mason 2009a). Additionally, two human skulls which were adorned with jet or ivory inlays as artificial eyes, ivory nose plugs, and ivory mouth covers, as well as a loon skull inlaid with jet pupils in the eye sockets, constitute one of the unique characteristics of Ipiutak art symbolism. The geographical changes can also be seen within Ipiutak culture between coastal and interior regions. While rich artworks were found at coastal sites such

as the Ipiutak site, the Cape Krusenstern site, and the Deering site, scarce art symbolism was represented by the artifacts from the interior Ipiutak sites (Mason 1997).

Regional symbolic variations also occurred between the Punuk and Birnirk cultures, which were contemporary during the period from AD 800 to 1200 (Dumond 2009; Fitzhugh 2009b). Generally Punuk culture occupied the Alaskan and Siberian coasts of the Bering Sea and several islands in the Bering Sea, whereas Birnirk culture is distributed on the both west and east coasts of the Chukchi Sea in Siberia and Alaska. Punuk culture inherited the OBS art tradition and continued to use incised lines and circles to decorate harpoon heads, counterweights, and other implements. The double compass-made concentric circles were used to represent therianthrope eyes. In contrast, the Birnirk implements were only decorated with simple curved double lines. The circle-dot design was rare and there were no eye designs engraved on Birnirk implements. Unlike Punuk culture whose harpoon heads were mainly made of ivory, most of Birnirk harpoon heads were made of antler. Ivory carvings of human and animals in Birnirk culture are much fewer and simpler than those in Punuk culture.

The art tradition in the Bering Strait region shows a continuously developing trajectory. The art forms of early prehistoric cultures such as Okvik and OBS culture were finally inherited by historic Yup'ik people. The changes in art forms and styles were to play an active part in Eskimo social life during the last 2,000 years from Okvik and OBS to Punuk, Thule, and the historical cultures.

The artisans of the Okvik and OBS cultures applied artistic designs on most hunting implements, working tools, and utensils (Arutiunov & Fitzhugh 1988; Mason 2009b). The decorated artifacts and representational human and animal figures were recovered from both residential sites (middens and houses) and cemeteries (Arutiunov & Sergeev 2006[1969], 2006 [1975]; Collin 1937). However, the artistic designs of Ipiutak culture were only found in ritual and mortuary contexts (Larsen & Rainey 1948; Mason 2009a). The decorated artifacts of Punuk culture included various ivory objects as similar as those in OBS culture. Although Punuk decoration motives were transmitted from OBS culture, its style is formal and mechanical rather than the freehand expression of OBS and

Ipiutak cultures (Wardwell 1986: 22). One more variant of Punuk culture is that the Punuk artworks were rarely deposited in graves. The predominant grave gifts were unworked whale bones (Bandi and Blumer 2002; Mason 2009b). Thule culture in the vicinity of Point Barrow resembles its local predecessor – Birnirk culture, to produce less and more simplistic decorative designs (Ford 1959; Stanford 1976). However, the decorated art was still favored by Thule groups who inhabited the Norton Sound and Kotzebue coasts (Such as Cape Krusenstern, Nukleet, and Iyatayet), and the Thule people on St. Lawrence Island (Geist & Rainey 1936; Giddings 1964, 1967). I emphasize the Thule artistic tradition in this region because I postulate that it likely bridged the Punuk and historical Yup'ik art. The stylistic changes in the Thule period include that harpoon heads were rarely decorated and decorative designs were mainly retained on other ivory, antler, and bone objects. In Nukleet and Iyatayet, brow bands appeared to be one of major bearers of geometric designs (Giddings 1964: 97-101). Giddings has accordingly commented that “Nukleet engraving art has retained many ancient elements out of a background shared with Punuk art” (103).

Some archaeologists assume that Thule culture experienced a period of a great hunting success but less artistic production (Collins 1937, 1973; Mason 2009b). A climate deterministic model has been proposed by Mason to explain this inverse relationship (2009b). In this model, Mason hypothesizes that the art scarcity of Thule culture was determined by the climate change represented by Little Ice Age. This so-called Little Ice Age in Northwest Alaska commenced in about AD 950 and lasted until the nineteenth century (Mason and Barber 2003: 81). Although Thule people experienced a colder period, the stormier conditions intensified upwelling of nutrients which attracted sea mammals. The abundant substance resource thus reduced human needs for cosmological and spiritual rituals (Mason 2009b). On the Alaskan northwestern coast, the drastic climate change shifted “from a less stormy, less productive Ipiutak period to much stormier and more productive Birnirk-Thule period. The inverse relationship exists between the production of symbolic capital meant that the less reliable the seas were, the

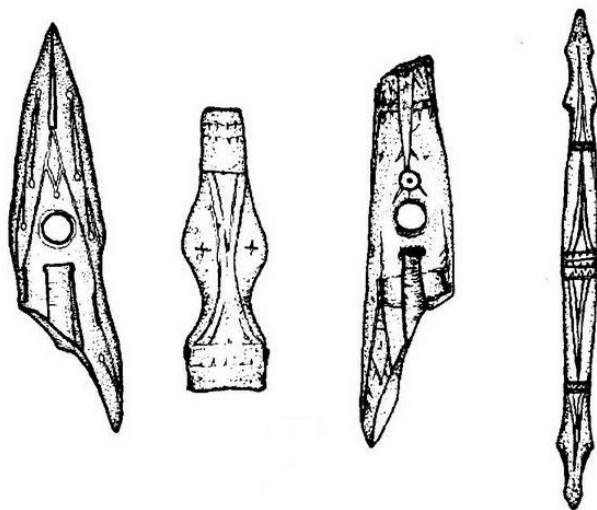


more the need for spiritual power intensified, and this accentuated the benefits of those allied with the powerful” (99).

This hypothesis of the inverse relationship between hunting productivity and art creativity is inspired by the stress alleviation model proposed by Taçon (1983, cited by Mason 2009b). In Taçon’s postulation, artistic production was usually caused by human psychological stress. Through an examination of prehistoric Dorset artworks, Taçon concludes that cultural and psychological stress resulted from increased ecological stress in the late Dorset period. The warming climate may have led to decrements in obtaining basic resources and the Dorset people thus relied on the spiritual power represented by art production in order to alleviate their psychological stress. As Taçon explains, “when ecological stress arises, ritual and ideological activities increase in order to compensate individuals and to prevent debilitating psychological stress and anxiety” (1983: 58). Despite Taçon’s emphasis on psychological elements, climate change has been seen as a major causation for cultural stress.

Mason’s climate-based explanation of Thule art circumstances is built on biased data. The Alaskan Thule culture came from two cultural resources. Thule culture in the vicinity of Point Barrow was directly developed from Birnirk culture. Excavations of the Thule sites in this region yielded few artistic artifacts (Ford 1959; Stanford 1976). However, data from the Thule sites in the Bering Sea and Southern Chukchi Sea regions, which received cultural influences from Punuk culture, contain rich artistic embellishment. This phenomenon has been unfortunately skipped by archaeologists who have proposed Thule art scarcity (such as Collins 1973 and Mason 2009b). These sites include Cape Krusenstern and Deering on the Kotzebue Sound coast and Nukleet and Iyatayet on the Norton Sound coast. All of these sites have yielded brow bands which are decorated with various geometric designs, implying brow bands had replaced harpoon heads, socket pieces, and counterweights of Punuk culture to be one of main pieces of hunting equipment bearing cosmological ideas during the Thule period. Such decorated brow bands were also found in Qimiarzuq houses of Thule culture at Point Hope (Mason & Bowers 2009: 29-31). The settlements at the Deering site representing early Thule also

have other decorated objects, including harpoon heads, bag handles, and needle cases (Figure 139). A Punuk-like design was found on some harpoon heads. The circle dot motif was also favored by Deering people to be used for decoration of harpoon heads (35-36). In contrast, Nukleet culture represents a continuous Thule period from AD 1100 to 1700 and the style and form of decorative art at Nukleet site remained stable throughout the period of occupation of the site, despite a continuum to incorporate newer elements at various periods. All decorative designs and carving works “show a stability in the adhesive of a community from early to late” (Giddings 1964: 117). The abundant artifacts found from Cape Krusenstern settlements also represent a long occupied period from AD 1200 to 1400. Most harpoon heads from this period are undecorated, but a few of them bear elongated triangles with horizontal lines filled in. The design of an ivory harpoon head (Figure 77-b) is centered on three circle-dots on two sides, attached with elongated triangles and ladder-like figures, recalling the concentric circles of Okvik and early OBS cultures with sharp spurs (Giddings & Anderson 1986: 67-85).



**Figure 139. Decorated objects of early Thule from House 1 of Deering site. After Mason & Bowers 2009: 36, Fig. 6.**

From the discovery of Punuk counterweights at Point Hope, Mason and Bowers speculated that some of Thule groups on the Alaskan mainland might have been Punuk immigrants from St. Lawrence Island (2009: 27). Giddings (1964) has also revealed the close relationship between Punuk and Nukleet art:

[I]t looks as if Nukleet engraving art has retained many ancient elements out of a background shared with Punuk art and has combined them into a greater variety of motives than any other comparably late western Eskimo regional art in continental America. Punuk formalized art disappeared on St. Lawrence Island several century ago, but Nukleet art has persisted, with but minor modification, to the present time. (p. 103)

Therefore, it is possible that the occupants of Cape Krusenstern, Deering, Nukleet, and Iyatayet may have been Punuk groups who immigrated from the Bering Sea islands and Chukchi Peninsula, or were Alaskan coastal groups (Birnik?) that received great influence from Punuk groups of the Bering Sea islands and combined these external elements to develop a new culture. These Thule groups distributed on Norton Sound and Kotzebue Sound coasts were very likely those who transmitted the old aesthetic tradition of prehistoric Eskimos to historical and modern Yup'ik groups.

Mason's climate change model, which is used to explain the "drop-off" of Thule art (2009b: 98), is also contradictory with his hotspots theory proposed in conjunction with Gerlach (Mason & Gerlach 1995). The hotspots model claims that the colder Anadyr water flows from Anadyr Gulf towards the Bering Strait and thus forms three nutrient rich positions. The high nutrient fluxes translated by the cold water thus foster high numbers of walrus and whales. The three hot spots are Point hope, the greater East Cape (including the Diomedes), and northern St. Lawrence Island, where the early Northern Maritime cultures (Okvik, OBS, and Ipiutak) had developed. This model seems to mean artistic production benefited from the colder and stormier condition and successful sea hunting. As Mason also mentioned, "Most certainly, the florescence of aesthetic

production is concurrent with an abundant walrus resource base, evident in Old Bering Sea and Ipiutak cultures” (2009b: 98).

Theoretically, the primary flaw of climate change model to explain prehistoric Eskimo symbolism is that it excessively relies on systems analysis and thus overlooks historic, cultural, and humanistic elements. In this model, the roles of social practice and cultural *habitus* are excluded and both economic and artistic activities are envisioned as passive adaption to climate changes. In this way, symbolic structures in the Northern Maritime cultures should be seen as production of practice rather than as a static and passive dimensions in social continuity. Symbolism and material culture were active in creating society and in creating “continual change” (Hodder & Hutson 2003: 94). The variants of artistic productivity were thus determined by particular *habitus* rather than the singular element – the climate change.

An investigation of the art symbolism of prehistoric Eskimos, provided by McGhee (1976), shows that artistic productivity among Eskimo groups varies temporally and geographically and it is not determined by a specific variable such as the settlement pattern, the economic activity, or a social dimension. He thus suggests: “(1) Degree of artistic productivity is not a fixed and stable attribute of a preindustrial society, but a variable and apparently labile phenomenon which might be expected to change in apparently random pattern over a period of a very few generations. (2) The apparent causes of high artistic productivity are so diverse that little can be said regarding the influence of specific economic, social, or psychological variables” (1976: 211). McGhee is right to say that art production is not associated with any specific variable. However, art symbolism must be associated with a particular historical context of social action because, as Hodder has emphasized, material culture is always “meaningfully constituted” and this particular context can be seen as “the totality of the relevant environment” (2000: 89). Social information is continuously preserved, transformed, and stored in the context of material culture (Tilley 1989: 189). Artistic productivity is thus directly influenced by human ideas which are produced in social life.

### **A Hypothesis: From Individual Ritual to Communal Ceremonialism**

The most drastic stylistic changes of prehistoric Eskimo symbolism in the Bering Strait region occurred during the Punuk period. First, as abovementioned, Punuk decorative designs show a less elaborate and more stylized and mechanical appearance than OBS art. All circles were “perfectly round,” suggesting that the circles might be made with a compass-like tool (Wardwell 1986: 22). The OBS therianthrope heads, represented by double freehand circles or ovals sometimes with nose and toothy mouth, were replaced by paired, round, compass-inscribed circle-dots (Collins 1937, 1973; Fitzhugh 2009b; Wardwell 1986). Second, the zoomorphic masks on OBS counterweights disappeared in Punuk culture, but abstract geometric designs dominated the Punuk counterweight surfaces (Collins 1937; Fitzhugh 2009b). Third, while the animal carvings on or as working tools continued, freestanding animal figures began to be largely represented. Fourth, the whale motifs started to appear in a large number. Except for the round sculptures, many ivory implements were carved in the form of a whale tail.

Without any doubt, the Punuk art symbolism was the outcome of social actions and was also involved in the social action as an active medium. The archaeological record reveals that Punuk culture witnessed an intensified complexity associated with whale hunting, special hunting cadre, the growth of population and settlements, the communal house, long distance trade, and more frequent warfare (Arutiunov & Fitzhugh 1988; Mason 1998).

The initial change of the Punuk culture was its increased whale hunting specialization. Although whaling was already developed by Okvik and OBS antecedents, it was only a supplemented economic activity to walrus hunting (Arutiunov & Fitzhugh 1988). The walrus hunting and sealing could be done by single hunter. However, the whale hunting needed at least five boats and each with a crew of as many as eight people. Such whaling activities doubtlessly intensified human relationships and team spirit (Wardwell 1986: 22). The whale bones were largely used to construct graves during the

Punuk period, demonstrating the great success of whaling. A Swiss archaeological crew, led by Bandi, excavated about 150 graves distributed in three cemeteries on St. Lawrence Island between 1963 and 1974. Most of excavated graves belong to Punuk culture, and the majority of them are structured by whale bones such as skulls, mandibles, scapulae, and ribs (Bandi 1995; Bandi & Blumer 2002). Large whale bones were so valued by Punuk people that great energy was invested to move the heavy bones a long distance from the beach to the graveyards. This phenomenon seems “to indicate that whale and whaling must have been important to the Punuk people” (Bandi 1995: 168).

Many occupants of Punuk graves have been identified as warriors (Bandi 1995; Bandi & Blumer 2002), implying increased militarism. On the mountain at Gambell, many raised boulders and pits were possibly used as defensive fortification by Punuk people (Bandi 1995; Mason 1998).

With the growth of population and village size and numbers, the large house, which resembles the communal house in the nineteenth century communities along the Northwest Alaskan coast, occurred during Punuk period. In 1972, a large Punuk house with an area of about 40 m<sup>2</sup> was found by Troutman Lake on St. Lawrence Island (Figure 54). Several whale skulls and numerous posts were used to construct the subterranean entrance gallery. Because of its unusual dimension, which indicates that it was not a normal dwelling, Bandi and Blumer realize that it was likely used as the communal men’s house (Bandi & Blumer 2002: 48).

Ethnographic data attest that social and religious life was centered on Eskimo whaling activities during the historical period. Whales also “played a critical and indispensable role in northwest Alaskan Eskimo culture,” and whale spirits were especially respected and honored (Kaplan et al. 1984: 19). As Larson has emphasized, “Economics, social organizations and regulations, and ceremonialism were all intertwined with the pursuit of these ‘largest animals’” (1995: 207). Furthermore, it is worth noting that all of these facets were associated with the *qasgiq* or communal house (Fienup-Riordan 1996; Fitzhugh & Kaplan 1982; Larson 1995; Nelson 1990; Rainey 1947). Each whaling crew possessed a particular communal house and the house was the

men's usual sleeping space because they slept with their families in their own houses only occasionally. The men's house also served as a place to have a sweat bath and as their workshop to make gear for hunting and warfare (Nelson 1900: 286-288). It was also a ritual and ceremonial center for the crew members (Kaplan et al. 1984).

Among the central Yup'ik people, the communal house was treated as a person and was given a specific name like a person. It even has its own *yua* (spirit) honored by the people. Most Eskimo ceremonies were held in the communal house. Religious rituals, masked dances, story-telling, feasts, and entertaining guests were the common activities held in the *qasgiq* during a ceremony (Fienup-Riordan 1996; Fitzhugh & Kaplan 1982). A number of large wooden rings, connected by wooden rods, were suspended from the ceiling to symbolize the universe. This ornament was called *ellanguaq* in the Yup'ik language, and it was usually ornamented with wooden models of birds, animals, and human puppet figures (Fienup-Riordan 1996: 122-132).

Among the Inupiaq, the whaling preparations and crew organizations were directed by the whaling crew captain or *umialik* in the *qasgiq*. Each whaling crew had one or more captains who was associated with one communal house. Becoming an *umialik* required excellent hunting skills, entrepreneurial capacity, and knowledge about the spiritual world. Usually an *umialik* was the owner of an *umiak* and a supervisor of all whale hunting activities. He had power to hold intercommunity feasts and had the right to choose cuts from the catch. He was also the presider of rituals and ceremonies (Kaplan et al. 1984). Each *qasgiq* had an affiliated shaman who directed rituals and performed shamanic dances to entertain animal spirits in order to ensure hunting success (Rainey 1947: 245-253).

The evidence of increased whaling activities and the communal house in Punuk culture signify the prevalence of communal ceremonialism, shamanic practices, and social structures which were characterized by whaling crews and whaling captains.

One of the most important ceremonial performances held in the *qasgiq* among historical Eskimos was masked dance. While some secular masks were worn by laymen during dancing in order to entertain the audience and tell stories, the religious masked

dances were performed for a spiritual purpose to communicate with spirits and the supernatural world. The images on masks are from the shaman's spiritual visions or from shamans' traditional knowledge. These mask images include mythological beings (such as raven and eagle), deities (such as sun and moon), human beings, spirits of animals, guardian spirits, and the shaman's helping spirits. The image of a half human and half animal usually represented the *inua* of that animal (Fienup-Riordan 1996: 59-100; Ray 1967: 4-24). Many shamans' masks were made to depict visions they experienced during the spiritual journeys (Ray 1967: 11). As Nelson writes, "Shamans make masks representing grotesque faces of supernatural beings which they claim to have seen" (1900: 394). Among central Yup'ik, the shamans traveled to other worlds for warding off evil spirits, changing weather, or requesting the *yua* of animals to give hunters hunting success. These masks carved by the shaman, or directed by the shaman but be carved by others, were powerful and dangerous. Therefore, they were wrapped and hidden under the benches by the shaman before a festival. The dancers were believed to receive supernatural visions during the performance. The common helping spirits (*tuunraq*) of the Yup'ik shamans often have a large, open toothy mouth (Fienup-Riordan 1996: 59-100). A god-like spirit that lived in the moon and controlled animal spirits was represented by masks (Figure 113). This moon deity had an open, crescentic, toothy mouth, and two large, round nostrils (Fitzhugh 2009a: 177; Nelson 1900: 399-400). Rasmussen has noted that the shaman at Point Hope was often impressed by the new faces which he could see during a spiritual trip. When the shaman came back from the other world, his first action was to carve masks to depict those faces. He might do this work by himself or might work with other woodcarvers. Usually the new songs, which would be sung in the performance, also derived from the spirits (1952: 131-132). Rainey (1947) has reported a shaman, Umigluk, who was living at the Village of Tigara. During his spiritual trip he met the spirit of a dead shaman, Anguluk, in a boat. Afterwards he was also possessed by the spirit of Anguluk when he was taught eight songs by the dead shaman. After he came back from the other world, in request of the villagers, Umigluk trained eight men to learn eight songs that he learned from Anguluk and to make eight



masks in the image of Anguluk, “with a protruding forehead and a single slit-like eye across the face” (Rainey 1947: 276). At the fall ceremonies, eight men wore the eight masks and performed singing and dancing as if sitting in a boat (276).

We have almost no knowledge of religious masks during Punuk and Thule period, but I suspect the masked dance started to prevail during the Punuk period, because the abovementioned ethnographic data demonstrates that the shamanic masks were closely associated with the men’s house, communal ceremonialism, and the shamanic ritual. The problem is that masks were usually destroyed at the conclusion of a ceremony. They were either burned by fire or placed on the tundra to decay (Fienup-Riordan 1996: 94; Hawkes 1913: 4; Himmelheber 1993: 11; Nelson 1900: 359). Nelson said that “[t]he masks are burned at the conclusion of the ceremonies, and should a man sell his mask he must replace it with wood in about equal amount for the sacrificial fire which takes place subsequent to the ceremony” (1900: 359).

Many mask-like faces were presented by Okvik and OBS ivory implements (Figure 10-2, 30, 31, 32, 33, 34, 36, 37, 39, 40, 44, 45, 46-1). Usually they have paired round eyes and some of them are indicated with a toothy mouth. Such images were frequently incised on OBS harpoon heads and counterweights. These images, especially the toothy motif, resemble those ethnographic toothy masks which represent the shamans’ helping spirits. It is likely that Okvik and OBS shamans carved the visions derived from their spiritual journeys on ivory implements instead of masks in later periods. Several ivory counterweights excavated from Ekven cemetery represent a human face with a large, crescentic, toothy mouth (Figure 43, 44), resembling the moon-deity on the Yupik masks. Mason has thus speculated that such figural art in Okvik, OBS, and Ipiutak cultures “are imbued with cosmic forces, such as ‘master of the universe’ or ‘man in the moon’” (2009a: 115).

Surprisingly, such figural art completely disappeared from the ivory or antler implements during Punuk and Thule period. The therianthrope design of OBS culture reduced to two formal, round concentric circles for eyes during Punuk and Thule periods and exhibited an abstract manner. In terms of the postulation of Punuk and Thule

ceremonialism, the magic expressions to depict shamanic visions on Okvik and OBS ivories possibly shifted to masks used by Punuk and Thule shamans in the ritual dances. The simplified Punuk designs were no longer to record shamanic visions but to continue the old iconological tradition. As Wardwell has claimed, “Punuk artists embellished the surface of their ivories, but seem to have had only dim recollection of the inspirations that produced the great art of their predecessors” (1986: 22).

In terms of the close association between magical expressions and production of hunting equipments, I hypothesize that hunting rituals were an important component of subsistence practices and were conducted largely by individual hunters during the Okvik and OBS periods. That is to say, for Okvik and OBS hunters, a hunting trip was simultaneously regarded as a hunting ritual and a spiritual journey to explore the supernatural world beneath the ocean. During the Punuk and Thule periods, possibly, the hunting rituals separated from the hunting practices and joined in the year-round ceremonialism and were closely associated with the communal house.

This hypothesis may be also manifested by the evolutionary trajectory of the so-called “winged object” or “counterweight.”

The winged object was not used by historical Eskimos. Thus there is no ethnographic information to provide explanations. Most of today’s archaeologists are inclined to think that it was equipped at the rear of the harpoon and stabilize the direction when it was thrown (Arutiunov 2009). However, it still remains unclear if it is an indispensable part for a harpoon complex in use, because Birnirk and Thule harpoon assembly actually does not include such counterweights and the Ipiutak site only has two counterweights to be found from its houses (Larsen & Rainey 1948). Archaeological records seem to suggest that most OBS counterweights are found from mortuary contexts on the Chukotkan coast and St. Lawrence Island, and few of them are from middens or houses. According to this information, Mason maintains that they they might serve as “specialized symbolic items” rather than functional tools (2009b: 91).

All Okvik and OBS counterweights are decorated with curvilinear or monster designs. The motifs on the Okvik counterweights mainly include radiation lines, spurred

lines, small circle-dots, and monster faces presented by the double circles or ovals as eyes (Bronstein 2009; Rainey 1941a). OBS counterweights bear more monster faces than Okvik culture. These monsters resemble the images of shamans' helping spirits on the historical Eskimo masks, suggesting monsters on counterweights may represent shamanic visions. These early counterweights were likely employed as spiritual paraphernalia in hunting practices in order to call animal spirits for hunting success. Mason may have a reasonable suggestion, that is, the degree of the symbolic significance of Okvik and OBS counterweights is much larger than the possibility of being functional stabilizers (2009b).

The decorative designs on Punuk counterweights declined dramatically. The spiritual role played by OBS counterweights was probably replaced by Punuk masks. The much simplified, abstract designs on Punuk winged objects might only exhibit a continuous artistic habit from OBS predecessors.

However, as abovementioned, not all artistic artifacts of prehistoric and historic Eskimos were used for religious purposes. Yup'ik masks, for example, can be classified into the religious masks used for hunting rituals and those "actors' masks" to entertain audiences and tell stories (Curtis 1930: 38-39; Fienup-Riordan 1996: 59; Himmelheber 1993: 31). Many sculpted ivory, wood, or antler animal or human figures in Punuk, Thule, and historical Eskimo cultures were used as props to commemorate and display ancestors' hunting events and other celebrated stories. This story-telling tradition may be traced back to some Okvik and OBS ivories which depict mythological stories. An Okvik human/whale carving might represent the ethnographic whale-child story. Some OBS ivories bearing walrus/woman images possibly represented the Mother of Walrus who was residing on the ocean floor. The raven/man image on some OBS spoon handles was likely used to represent the Raven Creator in Eskimo mythology. An OBS human/bear image on an ivory pottery paddle possibly served as telling the bear-child story which was still known by the Norton Sound Eskimo in the twentieth century (Collins 1969). Those images, in Arutiunov and Sergeev's words, "might be regarded as the beginning of a pictographic writing system that had an auxiliary function" (2006[1975]: 145).

In the eighteenth and nineteenth century, the pictorial engravings on ivories (most often on drill bows) were popularized by Eskimos living in areas from Norton Sound northward to Kotzebue Sound (Collins 1973: 21). A large numbers of ivory objects with pictorial engravings were collected by ethnologists before the 1890s. Ray has classified the motifs of these engravings into two groups. The first group represents the hunting scenes and tallies of killed games, which included foxes, otters, wolverines, beavers, ermines, bears, and whales. The second group is a record of everyday and festival activities, which included dancing, athletic contests, dwelling, and shamans' performances. Unfortunately, the collectors of the nineteenth century only focused on artifact collecting, neglecting to document the stories associated with the art. Thus, the meanings, functions, and motivations of the pictorial engravings were lost forever (Ray 1961, 1982).

Collins has proposed that the pictorial art might originate from the Thule-Punuk middens at Cape Prince of Wales, where numerous decorated objects were dug out. The supporting evidence is the realistic engravings which depict hunting scenes and dancing activities. These pictures included a man standing "with bow and arrows beside a caribou," "four men in an umiak harpooning a whale," "two men in kayaks throwing bird spears at a loon," and "two men dancing" (1973: 22). The similar hunting theme was also found from an ivory bodkin at Krusenstern, which depicts two men casting weapons at a caribou, and the third man in a boat (Giddings 1964: 91; Giddings & Anderson 1986: 85). Collins perhaps is right, because these engraved motifs are identical to the themes expressed by the later pictorial art. However, Collins' perspective narrowly focuses on the iconological element, failing to conduct a contextual investigation. In my opinion, the Alaskan Eskimo pictorial art was more likely to originate in a story-telling tradition which was rooted in the early Northern Maritime cultures. During Punuk and Thule period, this tradition was represented by free standing human and animal figurines, which were used in ceremonies and which served as props to narrate hunting stories or commemorate ancestors' achievements. The pictorial art possibly represented a variation of this ceremonial semiotic tradition.

### **The Hunting Theme in Shamanism, the Neuropsychological Model and the Animist Ontology Theory**

Among many cultures in the world which believe in shamanism, one of the shaman's major tasks is healing and soul retrieval (Hultkrantz 1978: 35; Rogers 1982: 3-7). Alaskan Eskimo shamans indeed served as doctors to treat patients, and some masks were used for curing (Ray 1967: 17-18). However, the most important duty of an Alaskan Eskimo shaman was to ensure successful hunt by requesting animals from the deities in the moon or beneath the ocean who control game on the earth. The shaman frequently traveled to other worlds for this purpose (Fienup-Riordan 1996: 63-64; Fitzhugh & Kaplan 1982:188-193; Nelson 1900: 427-441; Ray 1967: 4-17). As Fienup-Riordan has emphasized, "The *angalkuq*'s travels to other worlds served to expel evil spirits, uncover transgressions, and change the weather. One of the most important motivations of such travels was to request the *yuit* of the animals to give themselves to human hunters" (1996:64). It is worth noting that whether for expelling spirits, uncovering transgressions, or changing weather, these tasks usually were done for hunting purposes. John Pingayak, a Cup'ik Eskimo educator, said:

The trips that the shamans made are to the areas where the spirits of the animals are....[A]ll living things and animals caught for food have spirit places where they will never die. During spring seasons, the shamans bring the spirits of the animals and fishes to the people so that starvation will not plague their villages. (Fienup-Riordan 1996: 64)

In Alaskan Eskimo mythology, a great man-like being inhabited the moon and he was the controller of the animals on the earth. When game on the earth became scarce, the shaman needed to climb up or fly up to give offerings to the moon-man. A successful consultation with the deity in the moon would make the species plentiful on the earth.

The shamans in the Yukon and Norton Sound regions all claimed that they had power to visit the moon-man (Nelson 1900: 430). Among Yup'ik people, during the final annual winter festival which was called *Agayuyaraq* (way of requesting), the shaman would make a trip to the moon to request animals to ensure hunting success in the coming year. Yup'ik elder Paul John described such a shamanic ritual to Fienup-Riordan (January 13, 1977):

In those days, some of the angalkut said they went to the moon....When an angalkuq was going to go to the moon, all the men and boys went to the qasgiq....And out in the houses were the women with little boys who were not old enough to be in the qasgiq. Then when [the angalkuq] was going to go he would have someone warn them not to go outside until he came back, or the angalkuq would not find his way back. (Fienup-Riordan 1996: 64)

To visit the chief spirit, the Alaskan Eskimo shaman also often traveled down to the ocean floor through an ice hole. In Eskimo cosmology, the ruler at the bottom of the sea is a sea-woman who controls the villages of the animals and can send seals to human (Himmelheber 2000: 146). According to Ray's field notes, the shaman was able to remain beneath the ocean for several hours. When he crawled out of the ice hole, his clothes were always tangled with shells and seaweed which confirmed he had been under the sea (Ray 1967: 19). Unlike the other Eskimo groups, the ruler under the sea in Nunivak Eskimo's cosmology is a male deity, *Kugujuch*. This man of the sea has eyes of flint stones. When the shaman visited the villages beneath the ocean to request animals for food, he could either go to *Kugujuch* or to the animals themselves (Himmelheber 2000: 146). As the shaman visited the moon-man during *Agayuyaraq*, he journeyed to the villages on the sea floor at the close of the Bladder Festival (Fienup-Riordan 1996: 64). A shaman in Nash Harbor on Nunivak Island described the shaman's experience of traveling to the underwater world at the Bladder Festival. Before the spiritual journey to the sea floor, the shaman would call his spirits by dancing on a large drum. When the

shaman left the men's house, he twisted a line around his body before jumping into the ice hole. Beneath the ocean, with the guidance of his spirits as dogs, he entered a men's house in a small village where many animal spirits gathered in human forms. When he left, he looked back and found that many "people" followed him. Every year he had the same underwater experience (Himmelheber 2000: 151-152). In December 1879, Nelson reached a village near Cape Vancouver and encountered the Bladder Festival. According to his record, after the shaman came back from the journey beneath the ocean, the shaman described his spiritual experience beneath the ocean. He said some seal spirits were pleased because they were treated well in the festival, but others complained that they did not receive good treatment and thus they were not willing to provide sufficient food (Nelson 1900: 391).

The above records imply that the Eskimo religious ceremonies were mainly used to please the spirits of the game. As a way of ritual, the masked dances were performed to honor the *inuas* of animals (Fienup-Riordan 1996: 61). In Zagoskin's observation, the dances "express petitions, vows, or expressions of gratitude offered to the spirits or apparitions which have appeared to the shaman" (Michael 1967: 228, also cited by Fienup-Riordan 1996: 61). Nelson has explained the purpose of the Yup'ik "Inviting-In" Feast: "The *inuas* or shades of the various animals are invited and are supposed to present and enjoy the songs and dances, with the food and drink offerings, given in their honor" (1900: 359, also cited by Fienup-Riordan 1996: 61).

As the most important props in the shamanic masked dances, masks represented the Alaskan Eskimo cosmology and recorded the shamans' experiences during the spiritual journeys. The masks with various images "symbolized not only a specific spirit and its characteristic powers, but also the intricate relationship between the shaman (or the dancers) and a spirit who could control food, weather, or life itself" (Ray 1967: 9). While wearing the masks, the shaman was believed to have the power to see what normal people could not see. The dancers or wearers were believed to symbolically transform into the represented spirits or "to become mysteriously and unconsciously imbued with the spirit of the being which his mask represents" (Nelson 1900: 395). The images on

these religious masks not only derived from the shamans' vision (Ray 1967: 11), but also endowed the dancers "with supernatural vision during the performance" (Fienup-Riordan 1996: 64). The religious masks usually represented mythological beings, deities, *inuas* of animals, and the shaman's helping spirits and guardians (Ray 1967: 6-7).

Similar images are largely seen on the hunting implements in Okvik and OBS cultures. As abovementioned, the helping spirits represented by the Yup'ik masks, including the *tuunraq* (the *Angalkuq*'s helping spirits) and *nepcetat* (the ones that stick to the face), are usually characterized by a toothy mouth. The face with a toothy mouth is a common motif engraved on OBS ivories. A wolf mask, belonging to a Point Hope shaman, was recorded by Rasmussen (1952: 133-134). This mask was believed to be able to acquire a wolf's powers and abilities for catching game. A carving of a sea mammal was placed in the wolf's mouth, symbolizing the human wish for hunting. The mask was used for all kinds of game, but only one kind at each ritual. The mask was ornamented with hoops at the edge to symbolize the universe. Although the wolf represented the shaman's helping spirit, the shaman's power was not derived from the wolf but from the invisible spiritual source in the air. Okvik and OBS cultures carved many toothy wolf-like predators on implements such as foreshafts and socket pieces. Their styles were similar to those predatory images carved on the ethnographic masks, suggesting that they probably represented the shaman's helping spirits, which were endowed with power to kill the game. These artifacts imply that the close association between shamanism and the hunting theme had been fully developed during the early prehistoric cultures.

The hunting implements of early Northern Maritime cultures were not only ornamented with therianthropic and zoomorphic images, but many of them were also engraved with geometric designs such as circles, ellipses, and curved lines. Generally speaking, these figures resemble the motifs in the neuropsychological model proposed by Lewis-Williams and his collaborators (Clottes & Lewis-Williams 1998; Lewis-Williams 2002; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2005).

The neuropsychological model identifies three stages of altered states of consciousness in which mental images start with geometric phenomena in relatively light



trance and gradually enter the deep trance with iconic hallucinations (Figure 3, 4). Stage One is characterized by six entoptic forms (“grid,” “parallel lines,” “bright dots,” “zigzag lines,” “nested curves,” and “filigrees”) and by their dramatic movement (“pulsate,” “vibrate,” “rotate,” “expand,” “contract,” “combine,” and “change one into another”) (Lewis-Williams 2008: 29). Stage Three represents the deepest trance, and the percepts are characterized with iconic images in a vortex or rotating tunnel while the geometric forms disperse to the peripheral zones as background (30). The artistic motifs in this neuropsychological model include two types: the entoptic phenomena and figurative images.

However, Lewis-Williams’ shamanism theory has been criticized by other scholars (e.g., Bahn 1988, 1997, 2001; D áz-Andreu 2001; Francfort 2001; Quinlan 2000; Solomon 1997, 1999, 2001). The major flaws proposed are so-called “ubiquitous-shapes” (Dronfield 1996: 375) and the universal nature. The former problem means that there seem to be no clear criteria to differentiate which signs account for entoptic phenomena and which are not entoptics (Quinlan 2000:92), while the latter argument points out that the model neglects time, space, and cultural particularity (see Dronfield 1996: 376-377). Focused on these problems, Dronfield (1996) selects eight types of art through Africa, Europe, North America, and South America, which were recorded in ethnographic and ethno-historic accounts. His diagnostic study of endogenous and non-endogenous visual shapes demonstrates with a high degree of certainty that some geometric shapes, such as the square/rectangle and triangle, have nothing to do with subjective visual phenomena, while diagnostic motifs such as the meander, the zigzag of bars, the spiral, and the loop arc mostly represent subjective visions and are associated with shamanic practices.

The circles, ovals, and arc-like and spiral-like curved lines in Okvik and OBS cultures have great similarities with the second group of Dronfield’s diagnostic shapes. Can we therefore conclude that the geometric designs on the Okvik and OBS ivories, as well as the figural images, represented the shamanic visions? This may be problematic. If we agree that both figural images and geometric forms represent the shamanic visions in trance, according to the neuropsychological model, the former figures seem to correspond

to the State Three, a deep trance, and the latter shapes may correspond to the light trance. There is no means of confirming this mechanical rule by ethnographic data. From the Alaskan Eskimo ethnography, many religious masks were created to represent the shamanic visions in spirit journeys, but, all images represented on the masks were in animal or human forms (see Fienup-Riordan 1996; Ray 1967). Rare geometric forms were carved on the masks, and no ethnographic data shows that the Eskimo shaman perceived such entoptic forms.

The circle-dot motif, which dominated the designs of the Northern Maritime cultures for 2,000 years, was still alive among the historic Alaskan Eskimos. However, while it was used to decorate implements and utensils, it never occurred on the masks which might express the shamanic visions. Ethnographic data has revealed that the circle-dots symbolized the spiritual eyes, the joint marks, and the multilevel universe (Fienup-Riordan 1988, 1990). From this perspective, the geometric forms on the artifacts of the Northern Maritime cultures more likely represented spiritual knowledge, perhaps derived from shamanic tradition rather than visions derived from shamans' trance experiences. One more problem of the neuropsychological model is that it seems to highly restrict the definition of shamanism to visions or altered states of consciousness, but excludes traditional knowledge transmitted by shamans or elders.

Due to dissatisfaction with the neuropsychological theory, since the 1990s, some scholars began to employ the animist ontology theory to explain shamanic cosmology and explore the archaeological artifacts which potentially relate to shamanism in the past (e.g. Borić 2007; Ingold 2006, 2007, 2010; Harvey 2006; Pedersen 2001, 2007; Vapool & Newsome 2012; Viveiros de Castro 1998a, 1998b, 2004; Wallis 2009, 2013; Willerslev 2004). This new animism differs from animism in the western evolutionary model, which "proposed that indigenous people were mistaken for believing that inanimate objects were enlivened by 'spirits'" (Wallis 2009: 51). Indigenous peoples are seen as "primitive, uncultured, barbaric, inhuman, worldly or un-spiritual" according to evolutionary animism (Harvey 2006: 99). New animist ontology draws on Amerindian perspectivism to hold that the world is inhabited by people who include both human persons and non-

human persons (or other-than-human people) (Harvey 2006; Viveiros de Castro 1998a, 1998b, 2004). While humans see themselves as humans, animals and spirits also see themselves as humans. Animals have their own houses and villages, they perceive themselves as anthropomorphic beings, they own their specific culture, and they also organize their own social systems like humans (Viveiros de Castro 1998a: 470). Animals not only “participate in ceremonies and kinship systems alongside humans,” but also “engage in their own ceremonies and kinship systems,” demonstrating that they also have intentionality, self-awareness, and willingness like humans (Harvey 2006: 102). The animals are thus equally treated as humans in the animist ontology.

Among Alaskan Eskimos, this perspectivism was highly developed. For Alaskan Eskimos, many things, including animals and even lifeless things, possessed a soul which could take a human form. This soul abiding in things was called *inua* by the Inupiaq and *yua* by the Yup'ik. *Inua* or *yua* simply means “man” or “person” respectively in Inupiaq or Yup'ik linguistic (e.g. Fienup-Riordan 1996; Fitzhugh & Kaplan 1982; Merkur 1985; Ray 1967; Weyer 1932). This Eskimo belief equated animals and inanimate objects with humans and sees all of them as persons. The animal persons have their own villages like humans. Gangelich, a shaman in Nash Harbor on Nunivak Island, once described the shaman's spiritual experience on the ocean floor for German ethnologist Hans Himmelheber. At the bottom of the sea, the shaman made the water into air, his helping spirits transformed into dogs, one dog became the leader, and then he came to a small village. As Gangelich went on, “When he reaches that village he lets the leader go ahead, and he goes last. Many people have gathered in the men's house of this village. They are the lechlgat of animals. The ones sitting at the bottom have long faces, the ones above them oval faces, and those sitting uppermost have round faces (every year he has the same experience)” (Himmelheber 2000: 151). The ethnographic data also demonstrate that human persons were not “the ultimate arbiters of agency” (Wallis 2013: 12) in the Alaskan Eskimo cosmology, rather the negotiations and reciprocation between human persons and other-than-human persons were well-built up to sustain the harmony of societies. During the Yup'ik “Inviting-In” Feast, those other-than-human persons were

invited to participate in the ceremony, where they enjoyed the human persons' performances and were honored with food and drink offerings (Nelson 1900: 359). The animal persons who received good treatment would pay back human beings with hunting success. However, according to Nelson, if the non-human persons felt that they were not well treated by human persons, they were not willing to provide food (391).

The Eskimo shaman apparently played a vital role as a mediator or negotiator between the human persons and other-than-human persons. During festivals, he made a trip to visit the moon-man in the moon and the sea-woman (in some regions it is the sea-man) at the bottom of the sea, or directly consult the animal *inuas* for next year's hunting success. When food shortages or other crises occurred, the shaman needed to make similar spiritual journeys immediately (see Blodgett 1978; Fienup-Riordan 1996; Nelson 1900; Ray 1967). In indigenous societies with shamans, only shamans are capable of skills to engage in the communications with other-than-human persons and societies (Wallis 2013). In this way, shamanism and shamans' profession seem to be based on animist ontology, indicating that we may understand that the essential nature of shamanism is animism. Harvey thus states that "[S]hamans live and work for animists not shamanists," and shamans' "religions are animisms not shamanism" (2006: 139). It is obvious that this animist ontology is missed by the neuropsychological approach. The neuropsychological model has unfortunately reduced shamanism to the biological dimension and has equated the conception of shamanism with shamanic trance experience (see Wallis 2013).

Shamans are required among many indigenous societies because of the multi-natural ontology, which signifies multiple natures and one culture, or multiple objects and one subject. This Amerindian perspectivism differs from the anthropological multiculturalist ontology, which highlights multiple cultures and one nature, or multiple subjects and one object (Viveiros de Castro 1998a, 1998b, 2004). Alaskan Eskimo cosmology shows that both human persons and animal persons conceal an internal human form (*inua*), but their bodies are different each other. In perspectivism, the body not only implies the visible shape, but also signifies "an assemblage of affects or ways of being

that constitute a *habitus*” (Viveiros de Castro 1998a: 478). Shamanic rituals among indigenous peoples always exhibit their ideology on bodies. When the shaman is decorated with clothes, masks, or other prostheses, it indicates that the human body is animalized. The internal human form implies the spirit or the human spirit, but the external body represents the animal’s body (480). However, this metamorphosis is neither the change of the spirit nor the bodily transformation, but rather a rebuilding of affects and capacities of the body (481).

Religious masks were largely used for shamans’ performances in ceremony among Alaskan Eskimos. According to Ray, the images on these masks derived from shamans’ visions during trance state or from their knowledge (1967: 11). Most of these religious masks represented “spirits of animals and inanimate objects, guardian spirits and shaman’s tutelaries (helping spirits), and records of shamans’ journeys to the spiritual world” (7). If viewed from animist ontology, these masks reflected an intricate relation between human persons and other-than-human persons. Therefore, masks were not expected to conceal the human essence of a shaman or a dancer, but rather to evoke spiritual powers from a non-human body. As Nelson has described, when worn in such a mask, “[T]he wearer is believed to become mysteriously and unconsciously imbued with the spirit of the being which his mask represents” (1900: 395). In this case, the mask was a body; the mask was a person endowed with metaphysical power and with the affects and capacities of the non-human person represented (see Viveiros de Castro 1998: 482). A Yup’ik informant Jasper Louis (May 28, 1993) told Fienup-Riordan:

They wore masks and would cry out sounds of the animals they have carved into masks....

They would make a mask depicting something. The songs of the *angalkut*, the composition would illustrate the thing they were depicting. We ordinary people can’t truly understand the essence of the mask the way an *angalkut* did.

Did the masks belong to only the angalkut back then? They would carve the likeness of what they had seen. They would reveal the image. They have said they were the revelations of what they had experienced and seen. (Fienup-Riordan 1996: 66)

When analyzing Darhad Mongolian shamanic artifacts embedded in animist ontology, Morten Pedersen found that “the shamanic costume affords the shaman with a multiple, extra-human body,” which “is perceived to imbue shamans with the magical capacity to crosscut the boundaries between human and nonhuman beings” (2007: 142). The Darhad shamanic costumes, as well as the Alaskan Eskimos’ shamanic masks, represent a rebuilding body, namely, in Viveiros de Castro’s words, “a redefinition of its affects and capacities” (1998a: 481). This rebuilding or redefinition of the body indicates that the person of the human or nonhuman deeply permeates the artifacts. The boundaries between persons and artifacts are thus eliminated.

Many ivory hunting implements of Okvik and OBS cultures depict images resembling those carved on the shamanic dancing masks of historical Eskimos in the Bering Strait region. Almost all harpoon heads were carved in the shape of the bird, possibly the loon. Most of them were decorated with a pair of large, round eyes which might represent a supernatural being. Some of them depict toothy-mouth images. More such therianthropic images can be seen on OBS counterweights. Many Okvik and OBS socket pieces bear a predictor image also with toothy mouth. These implements, like the religious masks of historical Eskimos, were imbued with powers from those nonhuman persons, and represented rebuilt bodies which were engaged to communicate with other other-than-human beings beneath the ocean. In this way, when a decorated harpoon was thrown into the water, it possibly resembled the shaman ornamented with a mask during dancing and singing.

When an artifact is enlivened with decorative designs, the artifact is the person embedded in the thing. Spirits may not be immaterial entities. When a spirit is materialized through an artifact, human thought is simultaneously objectified through this artifact. In Ingold’s ontological perspective, “[B]eings do not simply occupy the world,

they inhabit it, and in so doing – in threading their own paths through the meshwork – they contribute to its ever-evolving weave” (2006: 14). This animist ontology thus disintegrates our anthropological belief based on Cartesian dualism. Again, Ingold writes, “[T]here is no inside or outside, and no boundary separating the two domains” (13). Therefore, the primary problem of neuropsychological theory is its obsessive grounding in the Western dualisms of culture/nature, spirit/material, and body/mind. It is firmly founded on the dichotomy law and simply holds that external representations (artifacts) reflect internal mind (visions) (see Clottes & Lewis-Williams 1998; Lewis-Williams 2002; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2005). As Wallis (2013) points out, the neuropsychological model fails to provide a holistic and satisfactory interpretation of rock art, because

rational-materialist readings of shamans’ neuropsychology now problematically characterise the shamanistic interpretation of rock art, drawing an axiomatic distinction between subjects and objects, humans and other-than-humans, and overemphasising the role of altered states of consciousness, to the point that shamans’ experiences, while they may facilitate social reproduction, are merely brain events. This mechanistic lens has more in common with enlightenment thinking than the ontologies of indigenous and prehistoric communities, and tells us as much about ourselves as modern/late-modern people as it does about prehistoric/indigenous artists/shamans. (pp. 10)

Here, variations between masks used by historical Eskimo shamans and hunting implements used by early prehistoric Eskimo cultures should be clarified. In the masked rituals, a human physical body was involved in the rebuilding of the metamorphosized body. These ceremonialized rituals were held in preparation for a hunting season or to give thanks to non-human communities after a hunting season. To some extent, the human body was endowed with or possessed by the non-human persons. Okvik and OBS hunting ivory implements, however, were central actors in the hunting activities. The

physical bodies of shamans or hunters were not involved in the rebuilding of the metamorphosized body. Nothing was concealed, but powers with the affects and capacities of those other-than-human beings (deities, shamans' helping spirits) were activated through those ivory artifacts. In contrast to the case of masks, ivories decorated with non-human images were possessed by or endowed with human spirits. Nevertheless, the building of a metamorphosized body with affects and capacities always derived from two spiritual sources: human persons and other-than-human persons. With the appearance of the men's house, possibly at the beginning of the Punuk period, this bodily metamorphosis represented by non-human images shifted from hunting implements to the religious masks, implying hunting rituals separated from the hunting activities and contributed to ceremonial patterns.

When artifacts are used or activated, they are living beings too. They represent multiple relational engagements such as between human persons and animal persons, human persons and artifact persons, and animal persons and artifact persons. In this way, agency is not only obtained from human entities but also from animal and object entities. All of these entities interact in a complex way and constitute reciprocal relationships. In Ingold's argument, artifacts are like bodies in that they are never fixed and stable but always remain situated in a place within flows of materials (2010). In the neuropsychological theory, as well as cognitive approaches, both objects and spiritual beings are considered passive and inert. However, viewed from the animist ontology, we may clearly realize that, whether Okvik and OBS hunting implements, or historical Eskimo masks, they both were agents which actively acted in a relational network and contributed to the social organization. In Ingold's words, animacy "is the dynamic, transformative potential of the entire field of relations within which beings of all kinds, more or less person-like or thing-like, continually and reciprocally bring one another into existence" (2006: 9). It is worth to note that animist ontology is to some extent consistent with practice theory (Bourdieu 1977, 1990; Giddens 1979) and postprocessual archaeology (Barrett 1994; Hodder 1982a, 1982b, 1982c, 1989, 2000; Shanks & Tilley



1982, 1987, 1988; Thomas 1996; Tilley 1989, 1999) which have emphasized the active and creative roles played by material cultures and symbolic structures.

As living beings, artifacts also have a life history from birth to death (Vanpool & Newsome 2012: 247). At the conclusion of a ceremony among historical Alaskan Eskimos, masks were usually burned by fire or placed on the tundra to decay (Fienup-Riordan 1996: 94; Hawkes 1913: 4; Himmelheber 1993: 11; Nelson 1900: 359). The death of masks seems to imply that their life history was only consistent with the process of ceremonies, namely, they lived for rituals. Without rituals, they are nothing. However, archaeological records evidence that there were no hunting implements to be ritually destroyed. Rather, they might die when their owner died. Excavations of Ekven cemetery and Uelen cemetery revealed that many Okvik and OBS hunters were buried with their hunting implements in the same grave chamber (Arutiunov & Sergeev 2006[1969], 2006[1975]). The souls of the dead persons, including human persons and things, might step into another life circle. However, after the turn of the OBS and Punuk periods, hunting implements were not buried with the deceased any more (Bandi 1995; Bandi & Blumer 2002; Mason 1998). This is possibly because the images representing shamanic visions might have shifted from hunting implements to masks since the beginning of the Punuk culture. The ritual death of therianthropic images was thus placed in a hunting ceremony rather than in a hunter's funeral ritual.

Alaskan Eskimo shamans were capable of seeing the unseen during the spiritual journeys and visions perceived were often carved on masks (Fienup-Riordan 1996). However, not all religious masks depict shamanic visions. The images either derived from the shaman's visions or from traditional knowledge (Ray 1967: 11). In Okvik and OBS cultures, as well as Ipiutak culture, while some hunting implements depicted shamanic visions, others, such as amulets and charms carved with animal motifs, might be made based on traditional knowledge rather than visions. These ivory, antler, or wooden amulets and charms in human or animal forms continued to be used by Punuk, Birnirk, Thule, and historical Eskimo cultures.

In an indigenous society, as Viveiros de Castro has noted, except for the salience of visions, “[T]here is more to the concept of perspective than meets the eye,” and the ontological conceptions “seeing” and “knowing” are clearly distinguished (1998b: 77). In Pedersen’s further understanding, “seeing” refers to “the ontological state defined by entertaining a species-specific perspective in the world,” and “knowing” can be defined “as the epistemological state of reflecting upon the world” (2007: 161). That is to say, artifacts of depicting visions or deriving from shamanic traditional knowledge are both in relations from subject to subject. In this way, explorations of shamanic artifacts should not simply rely on mental experience and external representations. Rather, all these shamanic artifacts imply interwoven relationships between all kind of beings – human people, non-human people, and things.

Although the circle-dot motif is identical to Stage One entoptic forms in Lewis-Williams’ neuropsychological rule, the Eskimo ethnographic data reveal that this salient geometric design was not derived from shamans’ visions but more likely from traditional spiritual knowledge, demonstrating that Lewis-Williams’ mental representation model is evidently not reliable to interpret prehistoric art symbols. In contrast, animist ontology seems to provide more effective explanations, because “perspectives do not consist in representations (visual or otherwise) of objects by subjects, but in relations of subjects to subjects” (Viveiros de Castro 1998b: 77).

### **Boundaries and Structures**

About thirty-five years ago, Robert McGhee (1977) presented a structural analysis of Inuit technology based on archaeological data from five Thule assemblages: the Walakpa site on the North Alaskan coast; the Lady Franklin Point collections from two sites on Southwestern Victoria Island; the Nunguvik site on Northern Baffin Island; the Silumiut site on the West Coast of Hudson Bay; and the Cumberland Sound collections from a number of Thule sites on the Davis Strait coast of Southern Baffin Island. His observation of hunting implements and working tools reveals that the technology was

divided into categories of sea mammal and land animal hunting implements, which were made of relatively different materials. While ivory and sea mammal bone were used to make harpoon heads and other gear for sea mammal hunting (such as snow goggles, kayak mountings, and dog trace buckles), the land animal hunting tools, usually arrowheads, were only made of antler. Ivory was also manufactured for women's gear, including sewing tools, needle cases, thimble holders, ulu handles, combs, pendants and chains, and bird-woman figurines. Generally, artifacts are grouped by McGhee as follows: hunting equipment for sea mammals (ivory and sea mammal bone); hunting equipment for birds (ivory and sea mammal bone), winter tools for sea ice (ivory); women's sewing tools, ornaments, and bird-women figurines (ivory); and arrowheads for land animals hunting (antler). McGhee hypothesizes that an oppositional structure of sea mammal and land animals framed the prehistoric Eskimo hunting activities and everyday life. His investigations of ethnographic data show that such careful distinction was still maintained by Historical Eskimos. For example, collections from International Polar Expedition to Point Barrow demonstrate that arrowheads for caribou hunting were made of antler, harpoon heads for seal hunting were made of sea mammal bones, but harpoon heads for walrus and arrowheads for bird were made of ivory (Murdoch 1892: 205-225). Birket-Smith claims that cooking caribou meat and sea mammal meat in the same pot was a taboo and the two could not even be eaten on the same day in some areas (1959: 168). Rasmussen observes that women were prohibited from sewing caribou skins on the sea ice, while walrus skin and walrus skin-made clothing was illicitly taken into interior regions during summer caribou hunts (1929: 193). McGhee (1977) further claims that, in Eskimo myths, women were always associated with winter life and sea mammals while men were associated with summer life and land animals. Many sea mammals were created by a female deity. The controller of land animals, who inhabit the moon, is a male deity. This mythological information leads McGhee to propose a dichotomy between woman-sea-ivory and man-land-antler. A set of oppositions are thus presented as land/sea, summer/winter, man/woman, and antler/ivory. However, the central dual concept which dominated Eskimo daily life was between land and sea.

In the following, I will survey the artifacts from the Okvik site, the Kukulik site, and the Nukleet site in order to determine whether the dual structure between sea mammal and land animal hunting implements can be found in these assemblages.

According to Rainey's report (1941a), the excavation of the Okvik site produced 217 harpoon heads; 208 of them are made of ivory and nine of bone. 185 of them are decorated with typical Okvik designs; the others have no decoration. Five ivory counterweights were found and all of them are decorated. The excavators also found twenty-eight arrowheads and eight of them were made of antler and were categorized as Type 1 by Rainey. These artifacts all have a blade slit and two long slender barbs and resemble the ethnographic arrowheads used to hunt land animals. All of them are incised with simple longitudinal lines which, in contrast with the designs on harpoon heads, do not seem to be meant for decorative art (Figure 18). There are eleven bird arrowheads. They are made of ivory and several of them have petaloid engravings in relief. All the dart heads and prongs for bird darts and fish spears from the Okvik site are made of ivory. The dart heads for sealing, bird catching, and fishing include both decorated and undecorated specimens. The side prongs for bird darts have nineteen specimens and eighteen of them have decorative designs.

Many OBS and Punuk artifacts were found from the Beach Slope in the West Mound at the Kukulik site; thus, Geist and Rainey (1936) consider this section one of the earliest Kukulik deposits. Sixteen harpoon heads were found in this section and all of them are made of ivory. Three of them are associated with the modern phase and have no decoration. The other thirteen are decorated, and eight of them bear the OBS design. Other sea hunting implements include three counterweights, all of which are decorated. Two of them are in the shape of OBS culture and the other one belongs to Punuk culture. There are six specimens of ivory dart heads, possibly used for fishing, and they are either decorated with simple longitudinal lines or decorated. UAMN specimen 1-1934-1495 (Figure 140-1) is a long dart head with 8 barbs and longitudinal lines. It measures at 22.8 cm in length. Specimen 1-1934-1494 (Figure 140-2) has 4 barbs and is undecorated. Both

artifacts were found at the lowest deposit on the clay, suggesting that they could be attributed to either OBS or Punuk culture.



1



2

**Figure 140. Ivory Darts from Kukulik site.** UAMN collection. 1. 1-1934-1495, 22.8 cm length. 2. 1-1934-1494, 18.2 cm. Photograph by Feng Qu.

The Northeast Beach Slope is the other section at the Kukulik site that includes artifacts from early cultures (OBS and Punuk). A total of sixty-three harpoon heads were found in this section. Among them, twenty decorated specimens bear typical OBS designs or are associated with OBS harpoon heads. Nineteen of them are decorated with Punuk designs. Nine harpoon heads are carved with Birnirk style and bear simple longitudinal lines or elongated Y figures. Fifteen of harpoon heads belong to the Thule and modern phases and they are all undecorated. All OBS and Punuk specimens are made of ivory. Only one of the Birnirk specimens is ivory-made; and all other Birnirk harpoon heads are made of antler. Except for one ivory harpoon head, Thule and modern specimens are made of ivory. Other hunting implements excavated from this section

include one Punuk counterweight and two dart heads. The ivory counterweight is decorated with the typical Punuk line design. The two ivory dart heads are both incised with four longitudinal lines. Almost no arrowheads were found in the Kukulik site (Geist & Rainey 1936).

There were no large land animals like caribou on St. Lawrence Island and the Punuk Islands. This perhaps explains why no land hunting weapons were found in the Kukulik site. The arrowheads found in the Okvik site, Rainey suggest, were likely used in warfare rather than for animal hunting (1941a: 546).

However, more land hunting weapons were found in the Nukleet site and the Iyatayet site. According to my statistics of the collection from the Gidding's excavation of the Nukleet site and the Iyatayet site, there are a total of 117 arrowheads. Among them, only three are made of ivory, while all others are made of antler. Some of them are decorated with longitudinal lines (Figure 141-1), while others are undecorated. Fifty-four harpoon heads were collected, including nine ivory and forty-five antler ones. A few of them are decorated. Two ivory harpoon heads bear eye-like circle-dots. The decorated antler harpoon heads are usually incised with simple lines. Harpoon dart heads for sealing were popularly used by the Nukleet people (Figure 141-2, 141-3). A total of thirty-one specimens were collected and they all are undecorated. There are seven spear side prongs and eight end prongs for bird hunting; they are both ivory-made and antler-made, and all of them are undecorated. Specimens of fish hunting tools include fifty-four fish spear side prongs and twenty-nine fish spear center prongs; they are made both ivory and antler and all are undecorated (also see Giddings 1964).

Because of no large land animals living on St. Lawrence Island and Punuk Islands, the land/sea binary structure could not have existed in early prehistoric Eskimo cultures (such as Okvik, OBS and Punuk cultures) on the Bering Sea islands. However, numerous antler arrowheads for hunting land animals and birds were found in the Uelen and Ekven cemeteries. Most of them are made of the same materials as the arrowheads in the Okvik site, and they are incised with simple longitudinal lines (Arutiunov & Sergeev 2006[1969], 2006[1975]). Many of the blunt arrowheads for bird hunting found in the

Ekven cemetery are richly ornamented (Arutiunov & Sergeev 2006[1975]). A large number of ivory harpoon heads, counterweights, socket pieces, and foreshafts were also excavated from grave chambers. Most of them belong to Okvik and OBS phases, while a few of them are attributed to Punuk culture. Almost all of them are decorated with elaborate designs.



1



2



3

**Figure 141. Arrowhead and Harpoon Dart Heads from Nukleet site. UAMN collection.** 1. 1-1949-2611, antler arrowheads, 11.2 cm length. 2. 1-1949-2943, antler harpoon dart heads, 11.4 cm length. 3. 1-1949-2921, 7.2 cm length. Photograph by Feng Qu.

The archaeological data derived from the assemblages of Uelen and Ekven cemeteries seem to suggest the existence of the land/sea structure. Nevertheless, if such a structure indeed played a fundamental role in prehistoric Asian Eskimo societies, I would argue that this land/sea structure might sustain equilibrium patterns, as some structuralists expected (e.g. Washburn 1983b). However, the relation between land hunting and sea hunting implements does not remain balanced. The rich ornamentation on harpoon gear, such as harpoon heads, socket pieces, and counterweights, and on other sea hunting implements suggest that there was a decorative emphasis on sea mammal hunting equipment. Much more energy was invested into the manufacturing of ivory sea hunting gear than on making antler land hunting tools (Arutiunov & Sergeev 2006[1969], 2006[1975]). Such imbalanced relation between land animal hunting and sea mammal hunting disproves that the land/sea structure is reliable to explain prehistoric symbolism in the Bering Strait region.

Although both land hunting and sea hunting implements were largely used by the Nukleet people of Thule culture, this does not constitute enough evidence to prove the land/sea structure. From Giddings' report (1964) and my observation of the Nukleet collection housed in UAMN, not only are most arrowheads for land animals made of antler, but most harpoon heads and harpoon dart heads for seal mammals are also made of antler. The bird and fish hunting tools also include both ivory-made and antler-made specimens. The Thule culture in the Nukleet site thus did not make a rigorous distinction between land hunting tools and sea hunting tools on the basis of construction of materials.

Both Tilley (1991) and McGhee (1977) have proposed a land/sea (or water) structure which is supposed to play an important part in prehistoric symbolism and social organizations. However, such dual structure is far from demonstrated by the archaeological data, at least in the Bering Strait region. According to my argument, in order to have a more holistic understanding of prehistoric symbolism and material culture in the Bering Strait region, we need to rely on the indigenous perspectivism built in indigenous peoples' own cosmology rather than the structural dualism founded on



western anthropological rules. That is to say, the broader indigenous ontological and cosmological structures, rather than mechanical dualist structures, are a more reliable way to explore prehistoric Eskimo art and materials.

When Viveiros de Castro began to systematically propose the indigenous perspectivism theory (1998a, 1998b), he has noted that Fienup-Riordan (1994) had already published a monograph in which she launched an elaborate explanation of the Yup'ik perspective cosmology (1994). In the Yup'ik cosmology, both humans and animals (nonhuman) possessed personhood and both of them were included in the same society. The relationship between human persons and nonhuman persons was viewed "as collaborative reciprocity by which the animals gave themselves to the hunters in response to the hunter's respectful treatment of them as nonhuman persons" (Fienup-Riordan 1994:50). However, the division between the human and nonhuman, in my opinion, does not constitute an opposed or separated structure. Rather, as Fienup-Riordan describes, "Eskimos traditionally viewed themselves as confronted with an originally undifferentiated universe in which boundaries between the human and nonhuman, the spiritual and material, were shifting and permeable" (1994: 46). Here, I prefer to use Fienup-Riordan's ontological conceptions of "boundary" instead of the structural terms such as "dichotomy," "opposition," or "dualist structure."

Admittedly, as emphasized by McGhee (1977), Eskimos indeed treated land animals and sea mammals in different ways and the tattoo was also used to separate the two categories. In the Yup'ik cosmology, sea mammals inhabited underwater villages and they were willing to return to the hunters as food. Land animals originally resided in the skyland and they would be released to humans by the shaman's request when the shaman journeyed to the skyland. Yup'ik people used different ways to greet hunted animals. For example, Yup'ik women fed hunted sea mammals fresh water because sea mammals live in the salty water and thus are thirsty for fresh water. On the other hand, when people greeted hunted land animals, they anointed animals with seal oil. The oil would be dabbed to animals' mouths, ear tips, feet, and tail tips (Fienup-Riordan 1994: 115-116). According to the structuralist perspective, such a cultural phenomenon may

point to an opposed structure between land animals and sea mammals, as suggested by McGhee (1977). However, in my view of point, the major boundaries were constituted between the human and underwater nonhuman and between the human and nonhuman on land. The opposition between land animals and sea mammals is evidently subordinate to the division between the human and the nonhuman. Ethnographic data reveal that the Yup'ik people were living within an undifferentiated universe in which boundaries between human and animal worlds were shifting and permeable. The boundaries between human persons or communities and nonhuman persons or communities were not naturally given but were culturally constituted. As Fienup-Riordan claims, "[M]any Eskimo peoples perceived the identity of humans and animals as a given and prescribed rules both to create and to maintain the proper boundaries and enact the proper ceremonial exchanges between them" (1994: 47). The religious rituals and shamanic practices created the passages to cross the boundaries between the human world and the nonhuman world. Yup'ik elders have described that human persons were engaged with nonhuman persons "in a constant cycle between birth and rebirth, and this process of reincarnation constituted Yup'ik society ideologically as an ahistoric entity" (49). Moreover, "[t]he relationship between humans and animals reflects a cycle of reciprocity in which animals give their bodies in exchange for careful treatment and respect" (355). Through rituals, personhood, as a nature shared by both human persons and non human persons, is situated in a fluid state and diffuses the boundaries. A harmonious relationship between different living beings is thus established in perpetuity.

Nevertheless, "Not all spirits are the same" (Vanpool & Newsome 2012: 247). The Eskimo ethnographic data show that not all nonhuman persons received the same degree of treatments from humans, and this can be clearly seen from artistic productivity. Among Nelson's collections, many ivory harpoon heads are decorated with double nucleated circles to symbolize a therianthropic being and many socket pieces are carved in the form of a predatory animal. Such decorative art, however, was not used to ornament land animal hunting implements (Fienup-Riordan 2005; Fitzhugh & Kaplan 1982; Nelson 1900). This symbolic emphasis on sea-mammal hunting is not only

demonstrated by prehistoric assemblages on the islands in the Bering Strait region which did not embrace large land animal hunting tools, but also by prehistoric cultures on the Siberian and Alaskan coasts which included land hunting tools (such as the Eulen and Ekven Cemeteries, the Ipiutak site, and the Nukleet site). Furthermore, the images of land predatory animals such as wolves and bears were commonly used to ornament sea hunting implements. The bird images were also powerful symbols to enhance the sea hunting power. Many harpoon heads and counterweights were carved in the shape of birds (See Fitzhugh 2009a). Examples of frequently decorated artifacts include many types of sea hunting equipment, such as snow goggles, boat hook barbs, harpoon rests for kayaks, drag handles, line attachers, and so on (Arutiunov & Sergeev 2006[1969], 2006[1975]; Collins 1937, 1973; Geist and Rainey 1936; Rainey 1941a).

The Ipiutak assemblage includes a large number of arrowheads and a relatively smaller number of harpoon heads. Out of a total number 1172 arrowheads, only twenty-three are made of ivory while the rest are made of antler. In contrast, the total number of harpoon heads is 159, and they are almost all made of ivory. Although it is believed that the arrowheads were used both for land hunting and warfare, a great number of them were likely designed for taking large land animals such as caribou. However, while almost all ivory harpoon heads are richly ornamented with decorative designs, the majority of arrowheads are only incised with simple longitudinal lines (Larsen & Rainey 1948). Furthermore, while the coastal Ipiutak assemblages included abundant artworks, the interior Ipiutak caribou hunters almost had no interest to create incised designs and representational carvings (Mason 1997). In the Nukleet site, the majority of both arrowheads and harpoon heads are made of antler, but the elaborate designs such as eye-like circles are only decorated on ivory harpoons and several ivory attachers, not on arrowheads and antler harpoon heads (Giddings 1964). In the collection from Thule houses at Cape Krusenstern, the decorative designs are also mainly incised on ivory sea hunting implements such as harpoon heads, drag handles, pick handles, and snow goggles (Giddings & Anderson 1986: 58-106). In rare occurrences, an antler harpoon head is incised with a complex design composed of circle-dots, ticked lines, and ladder-like

figures, and net-like figures (67) (Figure 77-b). A large number of decorated brow bands were found in the Nukleet site, the Cape Krusenstern site, and Deering site. Though these brow bands were all antler-made, they ornamented hunters' hats for sea mammal hunting. All these data seem to suggest that there was a "sea mammal hunting centralism" embedded in prehistoric and historic art produced in the Bering Strait region; namely, the decorative art was centrally associated with sea mammal hunting activities among Eskimos in this region. Based on the Eskimo perspective cosmology, I argue that this phenomenon was determined by the specific engagement between human communities and underwater nonhuman communities, rather than by the land/sea structure which have been stated by structuralists (e.g. McGhee 1977; Tilley 1991).

Referring to his postulated opposition between woman-sea-ivory and man-land-antler, in terms of Eskimo mythology, McGhee (1977) holds that Eskimo women are associated with sea while men are associated with land. Nevertheless, this argument is not based on a holistic investigation of the Eskimo myths; rather, it relies on selective data. McGhee emphasizes several myths in which a woman ruler inhabited the sea bottom and controlled the villages of sea mammals. Other myths illustrate that the controller of caribou on the land was a man residing in the sky or moon. However, such myths have many variations. According to Himmelheber (2000: 146), in the myths on Nunivak Island, the ruler of the sea is a man with eyes of flint stones. Among the Pacific Eskimos, the ruler of the land animals was a woman living in the mountain forests (Birket-Smith 1959: 165). These variations complicate and potentially invalidate McGhee's argument.

McGhee's opposition of woman/man (1977), like approaches from many other structural archaeologists (e.g. Braithwaite 1982; Hodder 1990; Yates 1989), was apparently influenced by Leroi-Gourhan's binary model for interpretations of European Upper Paleolithic cave art (1965, 1968, 1982, 1986). Leroi-Gourhan argues that the schema of image-making design in Paleolithic cave art was governed by a gender principle, and he accordingly categorizes all human and animal images and geometric forms into two sexual domains: female and male. The female group includes bison, ox,

reindeer images and “full” geometric signs such as ovals, triangles, and rectangles. The male group includes horse images and “thin” signs such as straight, hooked and branched lines and series of dots. However, Leroi-Gourhan failed to convince us why ox and reindeer images and “full” signs account for femaleness and why horse and “thin” signs correspond with maleness. Furthermore, the major problem with Leroi-Gourhan’s structural approach, as criticized by Conkey, is that he neglects the contextual investigations and ignores “some of the fundamental variables of archaeological inquiry such as time, place, ecology, or artifacts” (1989: 145).

Unlike Leroi-Gourhan, McGhee’s (1977) structural analysis does indeed employ contextual examinations (Hodder & Hutson 2003: 58). For example, he uncovers that many women’s working tools, including needle cases, thimble holders, women’s ornaments, and ulu handles, are usually made of ivory. This category of tools, in McGhee’s opinion, is associated with winter life on the sea ice and women, as opposed to the antler-made arrowheads, which are associated with summer life on the land and men. He thus proposes a binary structure: woman/man (McGhee 1977: 144-145). However, when referring to this gender opposition, he does not explain whether the sea hunting tools are associated with men or women. It is clear that the woman/man structure falls in a dilemma when confronting the assemblage of sea hunting tools. If we classify sea hunting tools in the male group, it is contradictory to the woman-sea-ivory association; if we sort them in the female group, it conflicts with the man-sea hunting relation.

In the prehistoric cultures in the Bering Strait region, such as Okvik, OBS, and Punuk cultures, we find a great distinction between women’s working tools and men’s tools. The former, including ulu handles, bag handles, blubber scrapers, needle cases, are richly ornamented with engraved and carved designs. The latter, including mattocks, sled runners, adze handles, and armor plates, are rarely ornamented. For example, the collection from the Okvik site includes twenty-seven ivory sled runners, and one of them is crudely incised (see Rainey 1941a). A large number of bone armor plates used for warfare were found in the Kukulik site, and none of them are decorated (see Geist & Rainey 1936). However, I argue that this symbolism division is not determined by the

gender binary structure. Rather, this phenomenon is most likely governed by the sea mammal centralism. From my observations of artifact collections from the Okvik, Kukulik, Nukleet, and other sites, almost all ornamented artifacts are associated with sea mammal hunting and processing. Blubber scrapers and ulus are the main tools used by women to process animals taken by men from the sea. Sewing tools were possibly used by women to make parkas from sea mammal skins. It is evident that the sea mammals as specific game were centrally valued by Eskimos in their cosmology. Moreover, although there is distinction between sea hunting conducted by men and animal processing conducted by women, I argue that this phenomenon is naturally due to the gender labor division which generated from human habitus.

According to indigenous perspectivism, all these ornamented artifacts, associated with sea mammals, were engaged with human persons in communication with nonhuman persons. They were things which created passages to across the boundaries between the human and nonhuman.

### Summary

This chapter provides theoretical perspectives of the prehistoric Eskimo cosmological system, iconography, symbolic structures, shamanic ideologies, and animist ontologies in the Bering Strait region. The major arguments are listed in the following:

- 1) The regional and periodical variants of art symbolism have been recognized by scholars (e.g, Mason 2009b; McGhee 1976). These changes were determined by cultural *habitus* rather than simple adaptation to environment. These variants were produced by cultural practices and demonstrated that art symbols were active elements involved in social actions. Art symbolism in prehistoric Eskimo cultures was both a medium for and outcome of social structures. The climate change theory proposed by Mason (2009b) overlooks cultural and historical elements which might have contributed to symbolic changes.

2) The Thule art decline model relies on archaeological data from the vicinity of Point Barrow, but neglects data from the Thule sites on the Norton Sound and Kotzebue Sound coasts, which were directly influenced by Punuk culture. The Eskimo art tradition continued to develop in these regions during the Thule period.

3) Ethnographic data demonstrate that the masked dances and masks bearing images from shamanic visions were usually associated with the men's houses, whaling activities, and communal ceremonialism. According to the discovery of the Punuk communal houses and intensified whaling activities, I hypothesize that the ceremonialism began at the beginning of the Punuk period. The mask-like imagery decorated on Okvik and OBS ivory objects, which represented shamanic visions, might have shifted to wooden masks and possibly served in communal ceremonies. The hunting rituals of Okvik and OBS cultures separated from hunting activities and contributed to ceremonial patterns during the Punuk and Thule periods.

4) The hunting theme played a predominant part in Eskimo shamanic practices. An ethnographic analysis shows that the therianthrope images decorated on Okvik and OBS ivories might derive from the shaman's altered state of consciousness. However, comparatively, geometric forms such as the circle-dot motif were possibly created according to traditional shamanic knowledge rather than reflecting the shaman's mental visions. This study confirms that the neuropsychological model has flaws when used for interpretations of prehistoric art motifs. The most fundamental problem is that the model was built on Western dualism and holds that prehistoric artworks as human representations reflected the human mental experience. In contrast, the recently proposed animist ontology theory reveals that many American indigenous peoples see animals and inanimate objects as anthropomorphic beings like humans. Ethnographic data confirms that the Alaskan Eskimo also valued this Amerindian perspectivism (see Fienup-Riordan 1994). Based on this animist ontology, I argue that the Okvik and OBS artworks bearing shamanic designs imply interwoven relationships between human people and non-human people. The hunting implements decorated with therianthrope images were thus engaged

with human desires and were endowed with non-human powers in order to ensure hunting success.

5) Robert McGhee proposed that Prehistoric Eskimo hunting implements and working tools contained binary structures presented as land/sea, summer/winter, man/woman, and antler/ivory. However, my contextual examinations of archaeological artifacts suggest that prehistoric Eskimo art productivity was more likely dominated by a “sea mammal hunting centralism” rather than by the binary structures which have been stated by structuralists. I thus argue that a holistic understanding of prehistoric symbolism and material culture in the Bering Strait region requires us to rely on the indigenous perspectivism built in indigenous peoples’ own cosmology rather than the structural dualism founded on our modern assumptions.



## **Chapter 7: Summary and Conclusions**

### **Summary**

In this thesis, I examine prehistoric art of the Bering Strait through the lenses of cognitive archaeology, structural archaeology, and shamanism theory (including the neuropsychological model). In Chapter 2, I provide a review of these contemporary theories which have been employed by archaeologists to interpret prehistoric art. While showing how archaeologists in the last several decades have used these theories to attempt reconstruction of the spiritual and aesthetic past, my review is centered on how theoretical problems occurred and criticisms of these theories.

Cognitive archaeology includes two categories. The first concern is on evolution and origins of human cognitive abilities for information processing during the Paleolithic period. The second category is related to the Neolithic period and onwards and focuses on religion, cosmology, iconology and ideology (see Nowell 2001). Generally, the cognitive approach deals with relations between the human mind and material culture. Structural archaeology was inspired by the linguistic approach of Ferdinand de Saussure (Pettit 1975). In my review of the structural trend in studies of prehistoric art, I am specifically concerned with binary models which have been used by archaeologists in interpretation of structures of material culture (e.g., Campbell 2000; Hodder 1990; Leroi-Gourhan 1965, 1968, 1982, 1986; McGhee 1977; Tilley 1991).

Structural and cognitive archaeologists are mired in difficulties because of their universalist approach in which geographical, historical, and social variations have been overlooked. Structuralism and cognitive theory are both founded on Cartesian dualism, which holds a rigid division between culture and nature, mind and body, spirit and material, subjective and objective, social and physical, humanity and animality, etc. For example, cognitive archaeology maintains that external representations are the products of an internal human mind and views prehistoric images as media for information

transmission. Structuralist archaeologists believe that material culture is ruled by a set of binary structures which remain unchanging across time and space. However, many archaeologists have realized that the rigid dualism actually fulfills modern humans' assumptions rather than revealing past ways of thought (Conkey 1989; Hodder & Hutson 2003; Robb 1998; Thomas 1996).

General shamanism theory in archaeological studies sees many prehistoric artworks as reflections of shamans' spiritual experience. The neuropsychological model connects neuropsychological experimental results with prehistoric art and shamanism. The claim is that prehistoric art imagery derived from shamanic subjective visions during altered states of consciousness (see Lewis-Williams & Dowson 1988). However, this neuropsychological theory has been rejected by other scholars (e.g., Bahn 1988, 1997, 2001; D'áz-Andreu 2001; Francfort 2001; Quinlan 2000; Solomon 1997, 1999, 2001). The first flaw is that there seem to be no clear criteria to differentiate which signs account for entoptic phenomena and which do not (Quinlan 2000:92). The second major problem is its universal nature because the model neglects time, space, and cultural particularity (Dronfield 1996: 376-377). The problems with the neuropsychological theory constitute a famous debate in contemporary archaeology (Dronfield 1996).

In Chapter 3, I conduct a historical survey of the Northern Maritime cultural sequence which includes Okvik culture, OBS culture, Punuk culture, and Thule culture. An archaeological review of Ipiutak culture is included in this chapter due to many similarities in art traditions between the Ipiutak culture and the Okvik/OBS cultures. In the survey of the artistic artifacts, I use data from the Okvik site collection, the Kukulik site collection, the Nukleet site collection, and other collections from St. Lawrence Island, which all are maintained in the University of Alaska Museum of the North. This historical survey also includes investigations of economic styles, settlement patterns, and other social elements in order to obtain an overview of the social, cultural, and environmental context of the art productivity.

Two problems are the focus of the survey of these prehistoric Eskimo cultures. First, my archaeological survey in this chapter shows that there were various temporal

and geographical variations in Eskimo art tradition in the Bering Strait region. For example, the styles in art had a dramatic change at the transition between OBS culture and Punuk culture. Additionally, while Punuk culture produced abundant ivory or bone engravings and carvings, the contemporary Birnirk culture had little art productivity. We do not know why and how this phenomenon occurred. Second, based on description of the art variants, a particular concern is given to the Ipiutak problem. Although Ipiutak art has many similarities with the Okvik and OBS in forms and styles, its unique characteristics much exceed those similarities. Although Ipiutak culture had more cultural similarities with ASTt and Norton traditions, especially in economic styles, there was a huge gap concerning art productivity. The Ipiutak people were outstanding artisans, but the ASTt and Norton tradition produced very few artworks. According to my comparative study between the Ipiutak assemblage and other cultural assemblages, I suggest that the Ipiutak was possibly a culture migrated from a Siberian area, but later fused with local Norton culture while also receiving cultural influence from Okvik and OBS cultures.

Chapter 4 presents a summary of ethnographic data in the Bering Strait region. The data is built from ethnographic literatures on both the Siberian and Alaskan sides. The central focus of the survey is on the relations between art productivity and daily life, ceremonialism, and religious practices. In descriptions of the Eskimo engravings and carvings, I also use data from the ethnographic collections of the University of Alaska Museum of the North. This ethnographic summary concludes that the creation of art involves multiple motivations and a diversity of purposes. The main functions of the ethnographic artworks include shamanic devices, charms and amulets, amusement props, story-telling props, and play toys.

Based on integrations of ethnographic data and archaeological data in the Bering Strait region, Chapter 5 provides an ethnographic analysis of archaeological artistic artifacts. The analysis focuses on three art styles: incised circle-dot motif on implements and utensils, animal figurines, and human figurines.

I use Fienup-Riordan's ethnographic analysis to analyze the potential meanings of circle-dots decorated on the archaeological artifacts. According to Fienup-Riordan (1988, 1990) and the stable style developed from the prehistoric period to the historical period, I hypothesize that the circle-dot motif on prehistoric ivory, bone, or antler objects might represent spiritual eyes, a metaphor of joint marks, and the leveled universe.

For animal figurines, I generally divide the carvings into two types on the basis of form: A and B. Type A carvings are the implements which are carved in animal form, while Type B carvings are freestanding effigies. Type A is further broken up into Type A-1 and Type A-2. Type A-1 represented the animals and birds, whereas Type A-2 represented human and animal transformations. Using data derived from the regional ethnographic literature, I suggest that the Type A-1 figurines were likely used as amulets and charms to protect hunting success, but Type A-2 figurines were possibly storytelling devices related to clan mythology. Type B occurred during Punuk and Thule period and they may have played a role in ceremonies as semiotic props to tell ancestors' hunting stories.

I use ethnographic data to reveal that the prehistoric Eskimo human figurines actually served multiple purposes. Generally, they were used as the shaman's devices, charms and amulets, props for a storyteller in ritual and ceremony, or as children's play dolls.

Chapter 6 provides structural and cognitive analyses to explain the variants of art productivity, cosmological structures, and relationships of humans with animals and things. In the first section of Chapter 6, I focus on the two empirical problems. The first problem is about a proposed "Thule art decline," which is stated by some archaeologists (Ackerman 1984; Collins 1973; Ford 1959; Mason 2009b; Stanford 1976). Mason (2009b) has proposed that Thule culture witnessed a climate change represented by the Little Ice Age. The colder and stormier weather intensified the upwelling of nutrients which attracted sea mammals. In his opinion, the successful hunting activities reduced human needs for cosmological and spiritual rituals and thus art was less represented in Thule materials. I used archaeological data from the Nukleet site, the Kukulik site, and

the Krusenstern site to demonstrate that art tradition was still strong among Thule groups which received Punuk influence on the Kotzebue Sound coast and the Norton Sound coast. Furthermore, relying on the theory of practice, I refute the use of a single climate change model to interpret the art variations and stress that the dynamics of art variants were virtually determined by social, cultural, and historical elements.

The second problem involves Ipiutak culture. Through comparative studies between Iputak cultures and preceding Norton culture, the contemporary neighboring Okvik culture and OBS culture, and the later cultures such as Punuk and Birnirk in the Bering Strait region, I am inclined to think that Ipiutak is a unique hybrid culture which originated from many cultural resources. Based on the theory of practice, I further point out that the cultural particularity is determined by human habitus, namely, cultural competence rather than climate and environment.

The second section of Chapter 6 focuses on the dramatic stylistic change at the transition of OBS culture and Punuk culture. The zoomorphic face masks on OBS ivory objects, represented by double circles (or ovals) with incising of nose and toothy mouth, completely disappeared in Punuk culture (Collins 1937, 1973; Fitzhugh 2009b; Wardwell 1986). Through a contextual examination, I propose a “mask – communal house – communal ceremony” model, in which I hypothesize that the mask-like images on OBS ivory implements might have shifted to wooden masks which were used in shamanic rituals on communal ceremonies. The disappearance of the zoomorphic masks on OBS ivories reflected the decline of the individual hunting rituals. The stylistic change was associated with the dramatic social changes in many elements in the Punuk societies.

In the third section of Chapter 6, I test the neuropsychological model in the examination of artistic designs decorated on archaeological and ethnographic artifacts. While some vision-derived therianthropic images might match the model to some extent, there was no data to support that geometric designs were associated with trance experience. For this reason, I turned to test the recently-proposed animist ontology theory to interpret the prehistoric Eskimo art designs. Combining the ethnographic analysis, I maintain that indigenous perspectivism was highly-developed among historical Eskimo

groups, and possibly also in the prehistoric Eskimo societies. In this way, I suggest that the animist ontology, combining regional ethnographic analysis, is more effective for interpreting the meanings of the prehistoric art than the universal trance model.

The fourth section of Chapter 6 provides a criticism of structural approaches in the studies of prehistoric art. In this section, I test McGhee's "woman-sea-ivory and man-land-antler" model through analysis of the prehistoric Eskimo artworks and realize that these binary structures are far from demonstrated by archaeological data from the Northern Maritime cultures in the Bering Strait region. My analyses of data collected from the Okvik site assemblage, Kukulik site assemblage, and the Nukleet site assemblage reveal that the prehistoric Eskimo decorative art was centrally associated with sea mammal hunting activities. I thus conceptualize such symbolic phenomenon as "sea mammal hunting centralism." Based on perspectives of animist ontology, I further suggest that this phenomenon might reflect the specific engagement between human communities and nonhuman communities under sea.

## Conclusions

In Chapter 1, I have proposed empirical and theoretical problems in terms of preceding archaeological studies of the Bering Strait prehistory and contemporary theoretical approaches in prehistoric art. These are evaluated here in the context of the preceding chapters.

**Empirical Problem 1:** Some archaeologists have stated that the Thule phase represents an artistic "decline" from the earlier prehistoric Eskimo art tradition (Ackerman 1984; Collins 1973; Ford 1959; Mason 2009b; Stanford 1976). This conclusion has been drawn in terms of Ford's excavations of the Birnirk-Thule culture sites in the vicinity of Point Barrow (Ford 1959) and Stanford's excavation of the Walakpa Birnirk-Thule site (Stanford 1976). The problem is whether the decline of Thule art represented a regional phenomenon only in the vicinity of Point Barrow or occurred in all areas in the Bering Strait region during the Thule phase. A further question concerns

the cause of this artistic phenomenon, if there was in fact a decline in art during the Thule period. Mason (2009b) has proposed a climate deterministic model (2009), in which he hypothesizes that the art scarcity of Thule culture was determined by the climate change represented by the Little Ice Age. My question is whether this climate-determined argument is strong enough to support the “Thule art decline” phenomenon.

In Chapter 3, I demonstrate that the Thule culture in the Bering Strait region developed from two sources: Birnirk culture and Punuk culture. Ford’s (1959) and Stanford’s excavations in the Point Barrow area revealed that local Thule culture was the direct continuity of Birnirk culture. As with Birnirk culture, Thule culture in the vicinity of Point Barrow produced fewer incised designs and carvings. In contrast, the excavations of Thule sites on Kotzebue Sound and Norton Sound coasts such as the Cape Krusenstern site (Giddings 1967; Giddings & Anderson 1986), the Deering site (Mason & Bowers 2009), and the Nukleet site (Giddings 1964) yielded abundant incised and carved artifacts. These assemblages of artifacts show a clear Punuk influence so that Mason and Bowers (2009) speculated the Thule peoples in these areas might have been offspring of Punuk peoples on St. Lawrence Island. The “Thule art decline” hypothesis has two flaws. First, this point of view relies on the data from Thule culture in the Point Barrow area, which developed from Birnirk culture, but overlooks the data from Thule culture on Kotzebue Sound and Norton Sound coasts, which received cultural influence from Punuk culture (Ackerman 1984; Collins 1973; Ford 1959; Stanford 1976). Second, Mason (2009b) indeed examined the Thule assemblages on Kotzebue Sound and Norton Sound coasts. However, his focus is mainly centered on harpoon heads but ignores the importance of the brow bands and other implements which were incised with various geometric designs. Therefore, his statement still adopted the “Thule art decline” model.

From my examinations of data collected from the Nukleet assemblage at the University of Alaska Museum of the North and according to archaeological reports of the Nukleet site (Giddings 1964) and the Cape Krusenstern site (Giddings & Anderson 1986), I conclude that the prehistoric Eskimo art tradition still continued during Thule period on the Kotzebue Sound and Norton Sound coasts, although Thule culture in the Point

Barrow area had few artworks produced. From my point of view, it was Thule culture on Kotzebue Sound and Norton Sound coasts that passed on the prehistoric Eskimo art tradition to historical Eskimos in the local and adjacent regions. The most prominent art of Thule culture is brow bands and other artifacts decorated with various geometric designs. Such implements were the main bearers of incised designs during the Thule period instead of harpoon heads.

In the first section of Chapter 6, I provide my criticism of Mason's climate change model which explains the "Thule art decline" hypothesis. In this model he maintains that the art scarcity of Thule culture was determined by the climate change represented by the Little Ice Age. The stormier conditions brought intensified upwelling of nutrients which attracted sea mammals. Because of hunting success, humans did not need rituals. Mason's climate change model has three faults. First, according to my above analysis of Thule art, the "Thule art decline" hypothesis is incorrectly built on biased data. His explanation of this incorrect hypothesis thus loses credit. Second, the context of a cultural phenomenon includes "the totality of the relevant environment" (Hodder 2000: 89). Mason's conclusion is actually based on social changes resulting from climatic change and seems not to be different from the processual approach which defines the culture as human adaptation to their environment. Relying on the theory of practice, I conclude that Mason's climate change model hypothesis is insufficient to interpret variations of prehistoric Eskimo art tradition. In my opinion, the particular historical contexts of social actions must take into considerations studies of prehistoric symbolism. The geographical and temporal variations of prehistoric Eskimo art productivity were more likely determined by cultural, historical, and particular habitus rather than changes resulting from climatic factors.

**Empirical Problem 2:** Many scholars distinguished Ipiutak culture from the Northern Maritime cultural sequence and are inclined to conclude that Ipiutak culture was developed from the Arctic Small Tool tradition (ASTt, 2500 – 800 BC) and the Norton Tradition (500 BC – AD 100) because it has more cultural similarities with the Norton Tradition in economic style and material culture (Collins 1973; Dumond 1977; McGhee



1976; Rainey 1941b, 1971). However, they fail to explain why ASTt and Norton antecedents had little artworks but Ipiutak descendants became outstanding artisans of ivory, antler and bone. Different from the aforementioned scholars, Mason suggests that Ipiutak culture might be preceded by the Okvik culture and that Ipiutak societies had a tight relation with OBS societies because Ipiutak culture borrowed many geometric decorative motifs such as circle-dots, rosettes, straight and barbed spurred circles and lines, and circles or ovals, from neighboring Okvik and OBS cultures (Mason 1998, 2009b). However, this conclusion avoids explaining why a large part of Ipiutak carvings such as open work objects, chains, swivels, composite burial masks, and decorated plaques had no parallel in the Northern Maritime cultures.

This dissertation research emphasizes the importance of art in explorations of prehistoric Eskimo cultural sequences in the Bering Strait region. First, many scholars believe that prehistoric art usually presented central values of ideology, cosmology, and beliefs in an ancient society. As Carolyn E. Boyd points out, “In the archaeological record, art as an artifact serves as a window into all components of the sociocultural system: technological, social, and ideological” (1996: 152). Second, the styles and forms of incised designs and carvings have been considered one of the major factors for defining an archaeological culture in the Bering Strait region.

In the sixth section of Chapter 3, I focus specifically on a comparative study of art traditions between Ipiutak culture and other cultures in this region. On the one hand, among all Ipiutak artistic artifacts, the most elaborate carvings were represented by ivory composite burial masks, ivory plaques, ivory daggers, and a large numbers of ivory open works. All these artifacts, which played a central part in Ipiutak assemblage, were absent in Northern Maritime cultures. Although Ipiutak culture had similarities in curvilinear designs with Okvik and OBS cultures, in my point of view, the cultural discrepancies between them much exceeded their homogeneity. On the other hand, I disagree with the point which considers Ipiutak culture the continuity of the ASTt and Norton tradition. The first and most radical reason is that ASTt and Norton tradition had scarce artistic designs and carvings. There were no traces of the typical Ipiutak carvings such as

composite burial masks, incised plaques, incised daggers, and open works in the ASTt and Norton assemblages. Second, the important Norton diagnostics such as pottery, ground slate, and oil lamps were not used by Ipiutak people (Dumond 1977; Larsen & Rainey 1948; Mason 1998). There were no middens in all Ipiutak sites (Mason 1998:273). Such characteristics implied that Ipiutak people had a high degree of mobility. According to above analysis, I conclude that Iputak culture had different origins not only from Okvik and OBS cultures, but also from the ASTt and the Norton traditions. The Ipiutak people were more likely immigrants from an unknown Siberian region and were localized with cultural influence from both the Norton tradition and the Northern Maritime tradition. As revealed by Larsen and Rainey (1948), the Ipiutak art motifs showed strong East Asian and Siberian characteristics.

In the first section of Chapter 6, in terms of theory of practice, I further suggest that creation of prehistoric art mainly relied on “a linguistic, physical and cultural competence,” namely, the *habitus* (Bourdieu 1977: 91). The styles, forms, and motifs of prehistoric Eskimo art in the Bering Strait region were more likely determined by the cultural and historical variables.

**Empirical Problem 3:** The imagery of mask-like therianthropic beings was popularly used by Okvik and OBS cultures to decorate ivory hunting implements such as counterweights and harpoon heads. However, such imagery completely disappeared from the ivory implements during the Punuk and Thule periods. This dramatic stylistic change remains an enigma in the prehistoric Eskimo symbolism.

This problem is addressed in the survey of the Northern Maritime cultures in Chapter 3. The mask-like faces on Okvik and OBS objects were usually composed of the eyes, the mouth, and the nostrils, and the eyes were often represented by double round concentric circles. The paired circles were still used by the Punuk and Thule people to perhaps symbolize a therianthropic face. However, the mouth and nostrils were absent on the face and these paired, perfectly round circles might lose the spiritual power and might only represent “recollections of the inspirations that produced the great art of their predecessors” (Wardwell 1986: 22).

Focusing on this dramatic stylistic change in the Northern Maritime cultural sequence, I provide a contextual analysis in the second section of Chapter 6. Complexity of Punuk culture was highly intensified. Social changes were represented by many aspects, such as whale hunting activities, whaling captain leadership, the growth of population and settlements, long distance trade, and more frequent warfare. One of the most important new aspects in social changes was the appearance of the large communal house (Arutiunov & Fitzhugh 1988; Mason 1998). Ethnographic data attests that the communal house was used as a ritual and ceremonial center associated with whaling activities. One of the prominent ceremonial performances held in the communal house was the masked dance. The therianthropic imagery, which was derived from the shaman's spiritual visions, was a common motif carved on the religious masks in shamanic dancing (Fienup-Riordan 1996). These images, usually carved with a toothy mouth and large, round eyes, resembled the mask-like images engraved on the Okvik and OBS ivory implements.

Based on the fact that the shamanic masks were closely associated with the communal house, communal ceremonialism, and the shamanic ritual during the historical period, I suppose that the evidence of whaling activities and the communal house in Punuk culture implied the prevalence of shamanic ritual and masked dances. According to this "whaling – communal house – masked dance" model, I hypothesize that:

- 1) The magic expressions depicting shamanic visions on Okvik and OBS ivories shifted to masks used by Punuk and Thule shamans in the ritual dances. The simplified Punuk eye-like designs were no longer meant to record therianthropic imagery derived from shamanic visions but only to continue the old iconological tradition.

- 2) The hunting rituals were an important component of subsistence practices and were conducted largely by individual hunters during the Okvik and OBS because of the close association between therianthropic imagery and hunting equipments.

- 3) A shift from individual ritual to communal ceremonialism occurred at the turn of the OBS phase and the Punuk phase. This ritual and iconological shift were determined by the social changes which were characterized by whale hunting, hunting

leadership, the growth of population and settlements, the communal house, long distance trade, and increased militarism.

**Theoretical Problem 1:** Cartesian dualism, which is characterized by a rigid division between culture and nature, mind and body, spirit and material, subjective and objective, social and physical, humanity and animality, etc., has constituted a theoretical foundation for structural archaeology, cognitive archaeology, and general shamanism (including the neuropsychological model). For example, cognitive archaeology and the neuropsychological model maintain that external representations are the products of an internal human mind. Structuralists believe that material culture is ruled by a set of binary structures which remain unchanging across time and space. However, many archaeologists in the last two decades have realized that these binary relations guide scholars to wrong conclusions in studies of material culture (Hodder & Hutson 2003; Robb 1998; Thomas 1996). Questions include: 1) If the art materials in Bering Strait prehistory reflect the human internal thought, how and why is the mind materialized? 2) How can we divide the internal thought from the external presentations and artworks are only information transmitters, as stated by cognitive scholars?

The dualism problem is proposed in the review of contemporary theories in Chapter 2. One of the major problems in contemporary archaeological studies is how we should defy our modern assumptions to find a way which enables us to enter the prehistoric mindset. Doubtlessly, Western dualism is based upon modern assumptions and misleads our understanding of prehistoric cognition. For over half a century, however, the archaeological practices of exploring material culture have long been organized by this anthropological dualism (Vanpool & Newsome 2012: 243). For example, Leroi-Gourhan uses binary gender structures to label all image-making designs in European Paleolithic cave art. Whether human images, animals, or geometric forms, they all were arbitrarily categorized into two domains: female and male (1965, 1968, 1982, 1986). Conkey criticizes that “Leroi-Gourhan’s structuralist insights have restricted our own experience and cultural positioning. It may be more a means of contemporary human experience than a record of past human life” (1989: 154). Cognitive archaeologists view

prehistoric images as media of information transmission. Such a perspective evidently relies on Western intelligence and rationality (Borić 2007: 97).

In the third section of Chapter 2, I provide a review of the newly proposed animist ontology theory because it has constituted a powerful challenge to traditional nature/culture or body/mind dichotomies (Wallis 2013: 23). The importance of this new animism is due to its attempts which draw attention away from our modern experience but draw on indigenous experience. As Viveiros de Castro points out, our modern anthropological ontology is founded on a discourse which can be described as “the mutual implication of the unity of nature and the plurality of cultures” (2004: 6). In contrast, Amerindian perspectivism asserts a single culture and multiple natures. This assertion implies that indigenous perspectivism is not cultural relativism, rather, a natural relativism, namely, multinaturalism (Viveiros de Castro 1998a, 1998b, 2004). Cultural relativism believes in “a diversity of subjective and partial representations, each striving to grasp an external and unified nature,” but natural relativism (perspectivism) proposes “a representational or phenomenological unity which is purely pronominal or deictic, indifferently applied to radically objective diversity” (Viveiros de Castro 1998a: 478).

As Viveiros de Castro has stated, such animist ontology can be seen not only in South America but also in the far north of North America and Asia (471). Ethnographic data in the Bering Strait region show that such perspectivism among Western Eskimos was highly developed. In the third section of Chapter 6, I rely on ethnographic data from Fienup-Riordan and other anthropologists (Fienup-Riordan 1994, 1996; Fitzhugh & Kaplan 1982; Nelson 1900; Ray 1967; Weyer 1932) to offer an analysis of Eskimo perspectivism. In Eskimo cosmology, “humans and animals are analogically related as human and nonhuman persons” (Fienup-Riordan 1994: 48). A spirit, which was called *inua* or *yua*, not only resides in humans, but also in animals and things and takes human form (Nelson 1900: 437-438). *Inua* or *yua* simply means “man” or “person” (Weyer 1932:299). Human persons and nonhuman persons shared the qualities of personhood and established the ground for mutual possession of awareness and a mutual respect (Fienup-Riordan 1994: 57-58). Such Eskimo perspectivism obviously “supposes a constant

epistemology and variable ontologies, the same representations and other objects, a single meaning and multiple referents” (Viveiros de Castro 2004: 6).

In the third and fourth sections of Chapter 6, I specifically focus on how animist ontology can be taken as an analytical device applied to the studies of prehistoric art. When I conducted analyses of carved and engraved artifacts, I followed Viveiros de Castro (1998a, 1998b, 2004), Borić (2007), Wallis (2009, 2013), Pederson (2007), and other scholars to emphasize the importance of the body in animist ontology. In the indigenous perspectivism, “the common condition of both humans and animals is humanity not animality” (Viveiros de Castro 1998a: 477). That is to say, humans and nonhuman persons are both endowed with animism, and “the site of main differentiation between different kinds of beings is the body” (Borić 2007: 89). Here, the body does not mean “distinctive substance or fixed shape,” rather, “it is an assemblage of effects or ways of being that constitute a *habitus*. Between the formal subjectivity of souls and the substantial materiality of organisms there is an intermediate plane which is occupied by the body as a bundle of affects and capacities and which is the origin of perspectives” (Viveiros de Castro 1998a: 478). Combining regional ethnographic analyses and contextual studies, I provide my conclusions about prehistoric Eskimo art symbolism based on an animistic ontology as the followings:

First, in Eskimo cosmology, the decorated artifacts were viewed as living being, which act as human beings and have spirits as well. The decorated artifacts represented a rebuilding of affects and capacities of the body. These animated things were not only produced by humans but also by nonhuman persons for consumption. The engagements existed both between things and humans and between things and nonhumans. The artifacts were decorated, as humans were masked or clothed, to be isomorphic with the fluid ontology of the nonhuman persons. Decorations or decorated artifacts thus created passages for humans (also nonhuman persons) to traverse unsurpassable ontological boundaries between the human world and nonhuman world. In this way, things and nonhuman persons, as well as humans, were all active in social actions.

Second, according to my previous analyses, while some artistic artifacts were used for secular purposes, others were deeply engaged with shamans in religious practices. The Eskimo shaman served his community as a negotiator to pursue harmonious relations between the human and nonhuman worlds. Some decorated artifacts constituted the shaman's extra body imbued with nonhuman power. The artifact could thus conduct a spirit journey like the shaman himself. Many Okvik and OBS hunting implements carved in shapes of predatory creatures might serve such a purpose, namely, to be engaged with shamans and nonhuman persons in communication with those other nonhuman persons residing on the ocean floor.

In sum, there is no dichotomy between culture and nature, humans and animals (things), body and mind, and internal mind and external presentations. Many prehistoric artifacts with elaborate designs reflected permeable relationships between these oppositions.

**Theoretical Problem 2:** Structural archaeologists maintain that material culture embeds sentence structures like linguistics, which is governed by binary principles (Leroi-Gourhan 1965, 1968, 1982, 1986; McGhee 1977; Tilley 1991; Washburn 1983a). McGhee (1977) provides a structural analysis of ivory, bone and antler artifacts in Alaskan and Canadian Thule culture, and hypothesizes that a set of dichotomies such as land/sea, summer/winter, man/woman, and antler/ivory constituted semiotic structures embedded in Thule material culture.

In the second section of Chapter 2, I provide a review of the structural trend in the studies of material culture. In the 1960s and 1970s, Lévi-Strauss proposed that social culture is always dominated by a pair of opposite notions which constitute binary structures (Lévi-Strauss 1963[1958], 1966[1962], 1969[1949], 1983[1964], 1990[1966], 1990[1968], 1990[1971]). Based on Lévi-Strauss' structural perspective, Leroi-Gourhan hypothesize that image-making in European Paleolithic cave art was deliberately designed to employ sets of structural principles. Whether human imagery, animal imagery, or geometric signs, all motifs are considered to have gender: male or female (1965, 1968, 1982, 1986). This binary structure model has been seen as an universal rule

to be used in studies of Scandinavian rock art (Tilley 1991), the Iron Age settlement in Scotland (Campbell 2000), prehistoric Eskimo artifacts (McGhee 1977), and European Neolithic cultures (Hodder 1990). However, other archaeologists complain that such a binary model misleads scholars to deal with symbols and structures and fulfills modern human assumption (Conkey 1989; Hodder & Hutson 2003; Robb 1998; Thomas 1996).

In the fourth section of Chapter 6, I specifically focus on McGhee's structural approach to archaeological data from five Thule assemblages in Alaska and Canada. McGhee suggests that an oppositional structure of sea mammals and land animals framed the prehistoric Eskimo hunting activities and everyday life, and dominated the making of artifacts. In his hypothesis, Eskimo women were always associated with winter life and sea mammals while men were associated with summer life and land animals. A set of oppositions such as land/sea, summer/winter, man/woman, and antler/ivory constituted a grammatical principle embedded in prehistoric Eskimo materials (McGhee 1977).

Following a review of McGhee's theory, I provided a structural analysis of prehistoric artworks in the Bering Strait region. My analysis is mainly based on data collected from the Okvik site, the Kukulik site, and the Nukleet site. However, my investigation reaches a conclusion that is antithetical to McGhee's hypothesis. The main points are listed as following:

- 1) There are no large land animals such as caribou living on St. Lawrence Island and the Punuk Islands. Thus, there was no room for land/sea binary structure embedded in early prehistoric Eskimo materials on the Bering Sea islands.

- 2) In the Nukleet assemblage, not only were most arrowheads for land animals made of antler, but most harpoon heads and harpoon dart heads for seal mammals were also made of antler. Such a phenomenon fails to provide evidence to prove the land/sea structure.

- 3) My analysis of archaeological data reveals that the decorative art was centrally associated with sea mammal hunting activities in the Bering Strait region. All these data seem to suggest that there was a "sea mammal hunting centralism" embedded in prehistoric art productivity. Based on the idea of Eskimo perspectivism, I argue that this



phenomenon was determined by the specific engagement between human communities and underwater nonhuman communities, rather than by the land/sea structure as stated by McGhee (1977).

**Theoretical Problem 3:** When I began to conduct research on prehistoric art in the Bering Strait, based on the shamanic tradition revealed by the ethnographic data, the following questions arose: Were all of the artwork, some of them, or none of them associated with shamanism? If we can determine that shamans in prehistory produced some of the artifacts, why were these artifacts created, how were they used in shamanic practices, and what were the meanings of these symbols? If few or none of the symbols have anything to do with shamanism, what are the motivations for the symbolic creations and what are the functions and the meanings of the non-shamanic symbolic complex?

As described in Chapter 2, the Neuropsychological model was popularized by Lewis-Williams and the other archaeologists (e.g., Clotte & Lewis-Williams 1998; Lewis-Williams 2002, 2006, 2008; Lewis-Williams & Dowson 1988, 1993; Lewis-Williams & Pearce 2005). They connect neuropsychological research with prehistoric art and claim that prehistoric artworks are the representations of shamanic subjective visions in trance. My questions related to this problem are: Can a connection between trance and art be verified by ethnographic data? Were all shamanic artworks in archaeological and ethnographic records related to trance, or were only some of them representative of shamanic trance? Were there some non-trance artworks produced from shamanic practices? Is the neuropsychological model a dependable measurement to detect past shamanism?

For over one-hundred years, one of the most prominent problems in the studies of prehistoric art is that scholars often popularize a singular theory to understand all artworks. Such theoretical approaches include “totemism” (e.g., Frazer 1887; Reinach 2003[1905]), the “magic hunting theory” (e.g., Breuil 1952; Grant 1965, 1967; Heizer and Baumhoff 1962; Reinach 2003[1905]), and the “Goddess theory” (e.g., Gimbutas 1982, 1989, 1991; Hawkes 1968; James 1959; Renaud 1929; Stern 1969). Shamanism theory is not an exception in this archaeological tradition. In the third section of Chapter

2, I examine the trend that shamanism archaeologists employ trance theory to explain all artworks while ignoring spatial and temporal elements. Meanwhile, I also provide a review of criticism of the shamanism trend proposed by other scholars (e.g., Bahn 1988, 1997, 2001; D áz-Andreu 2001; Francfort 2001; Quinlan 2000; Solomon 1997, 1999, 2001).

Whether it be magic hunting, Goddess, or shamanism theory, all share a fundamental problem: human life is seen as stable and unchanging. The geographical, social and historical context has thus been missed. For this reason, I highlight postprocessual archaeology in this study because postprocessualists are concerned with contextual studies of material cultures. In Conkey's words, this contextual movement has elucidated "how structure 'make sense' in particular historical contexts of social action" (1989: 152). In Chapter 4, I provide a survey on ethnographic data about historical Eskimo art tradition and shamanic practices in the Bering Strait region. My examination demonstrates that the creation of art involves multiple motivations and a variety of artifacts are usually encoded with variant connotations. While some artifacts were used by shamans for rituals, or were used by individuals as amulets and charms, others were used for aesthetic, narrative, or amusement purposes. The social, environmental, and economic contexts of the Eskimo societies interacted with human artistic productivity.

My survey of prehistoric art of Northern Maritime cultures in Chapter 3 shows that the archaeological artifacts have different "find contexts." Some were excavated from graves while others were found in houses or middens. Combining contextual investigations, in Chapter 5, I offer an ethnographic analysis of archaeological artworks found in the Bering Strait region. I confine myself to focus on three topics: circle-dot motif, animal figurines, and human figurines. My ethnographic analysis and contextual examinations reveal that while some artifacts were potentially produced from shamanic practices, others only functioned for secular purposes as entertainment props or toys.

The archaeological artifacts which were used by past shamans or were related to shamanism include therianthrope images, animal figurines, and circledot motifs. First, some therianthrope images, which were engraved on Okvik and OBS hunting

implements such as ivory harpoon heads and harpoon counterweights (and have large, round, staring eyes and toothy mouth) possibly represented deities or helping spirits which were “seen” by shamans during their spirit travels to other worlds. However, these shamanic visions no longer existed with ivory implements in later Punuk, Birnirk, and Thule cultures. This vision art tradition might, as I have hypothesized in previous chapters, transit to masks with the arising of the public ceremonialism. Many Okvik and OBS socket pieces were carved in the shape of a predatory animal, which might represent shaman’s helping spirits to help hunters to enhance their hunting power. Second, my ethnographic analysis shows that circle-dots were symbols of spiritual eyes, joints, and leveled universe in the Eskimo cosmology, and they might represent a shamanic knowledge rather than shamans’ vision experiences. Third, many carved animals were used as parts of hunting equipments such as attachers, hoops, pendants, and drag handles. The most frequently-occurring animals include polar bears, seals, walruses, and whales. These artifacts were possibly various amulets and charms carved and used under shamans’ instructions, and were used to drive invasions of evil spirits for hunting success. This tradition was relatively stable and was shared by all prehistoric and historic cultures in the Bering Strait region.

Nevertheless, a large number of artistic artifacts might have nothing to do with religious practices. Some Okvik and OBS artifacts which bear human and animal imagery, such as human/polar bear, human/walrus, and human/whale, seem to record the Eskimo tribe’s myths. During the Punuk and Thule periods, many animal figurines, most of which are made of ivory or wood, were carved to commemorate ancestors’ hunting achievements. These artifacts were possibly used in ceremonies as props when the hosts told stories to the invited guests. During the historical period, pictographic art flourished among the Inupiaq people. These pictographic engravings on ivory or bone working tools, such as drill bows and chisels, represented a new artistic trend which was characterized by hunting scenes and Eskimo daily life and ceremonial activities. Many engravings depicted tallies of killed game, resembling those animal figurines to commemorate prominent hunting events.

Human figurines were a complicated phenomenon throughout the whole Northern Maritime and historical periods. As analyzed in the third section of Chapter 5, these figurines in different sizes, shapes, and manners have served multiple purposes. The religious figurines likely included shamans' helping spirits, infertility charms, protecting spirits, house guardians, hunting charms, and fire deities. Some human figurines during Punuk and Thule cultures, like some animal figurines, were used as props in ceremony to represent ancestors' hunting achievements or famous ancestral hunters. Play dolls were also among human figurines since as early as 2,000 years ago.

In the third section of Chapter 6, I compare the results of ethnographic analysis of archaeological artifacts with the neuropsychological shamanism theory and conclude that the neuropsychological model is not reliable to interpret prehistoric art. Although it helps to identify some images which represented potential shamanic visions, its equation of shamanism and trance experience fails to explain other artworks which might be derived from shamanic knowledge and were used for secular purposes. Relying on an employment of animist ontology theory, I further point out that the most basic problem of neuropsychological theory is its obsessive grounding in the Western dualism and simple assertion that artifacts as external representations directly reflect subjective visions.

Influenced by Christopher Hawkes' "ladder of inference", which states that "unaided inference from material remains to spiritual life is the hardest inference" (1954: 162), early processual archaeologists in the 1960s and 1970s believe that it is difficult to find methodology to build a connection between human ideology and material remains (e.g. Binford 1965). In contrast, both structuralism and cognitive archaeology have maintained that the human mind and cognition can be studied through investigating symbols and religious remains and that prehistoric art has been seen as rich of a resource of cognitive information as ancient writing system. Prehistoric art is thus considered "as a window into all components of the sociocultural system: technological, social, and ideological" (Boyd 1996: 152). The major importance of structural and cognitive trend takes archaeologists out of the shadow of Hawkes' inference ladder. In the past decade,

many archaeologists have attended to the reconstruction of the past ritual actions and belief systems (e. g. Biehl & Bertemes 2001; Fogelin 2007, 2008; Hayden 2003; Insoll 2004; Kyriakidis 2007; Steadman 2009; Whitehouse & Martin 2004; Whitley & Hays-Gilpin 2008). Some recent archaeologists tend to see the archaeology of spiritual life as conceptually and methodologically simple “as other branches of archaeological research and should proceed in pretty much the same way” (Fogelin 2008: 131).

Nevertheless, the contemporary archaeological theories of prehistoric art have suffered from problems such as universalism and Cartesian dualism. All these problems have been initiated from a deep belief in our modern logic and our own assumptions. This dissertation research suggests that no universal rule is able to interpret all prehistoric cultures. Every artifact was produced and used in a specific time, at a specific place, and within a particular context. Without a contextual examination, there is limited access to probe in the meaning of the artifact. Because of this, archaeologists need to fully focus on social context of artifact manufacture and use.

A further concern is about the dual dichotomy. Like their Cartesianist predecessors, structuralist and cognitive archaeologists, as well as the advocates of the Neuropsychological model, have arbitrarily separated our world into two domains: the interior and the exterior, the spiritual or the material, or the human and the animal. Archaeologists have long been full of enthusiasm in working on such divisions. However, indigenous perspectivism demonstrates that the material culture cannot be segregated from associated-mental frameworks (see Vanpool & Newsome 2012: 243), there is a diversity of subjectivities in the world (Viveiros de Castro 1998a: 478), and animacy bring beings of all kinds into existence (Ingold 2006: 10). As Ingold has stated, “[T]here is no inside or outside, and no boundary separating the two domains” (2006: 13). The world that humans, animals, and things inhabit fulfills various relationships between them rather than being composed of domains with clear boundaries. In turn, the most important issue for archaeologists is to explore relationships and contexts rather than arbitrarily categorizing the world.









## REFERENCES

- Ackerman, R. E. 1984. Prehistory of the Asian Eskimo Zone. In D. Damas (ed.), *Arctic*, pp. 106-118. W. C. Sturtevant (gen. ed.), *Handbook of North American Indians*. Vol. 5. Washington D. C.: Smithsonian Institution.
- Aldhouse-Green, M. 2004. *Archaeology of Images: Iconology and Cosmology in Iron and Roman Europe*. London: Routledge.
- Aldhouse-Green, M. & Aldhouse-Green, S. 2005. *The Quest for the Shaman*. London: Thames & Hudson.
- Alekseev, N. 1984. Helping Spirits of the Siberian Turks. In M. Hopp á (ed.), *Shamanism in Eurasia*, Part 2: 268-279. Göttingen, Germany: Edition Herodot.
- Anderson, D. D. 1984. Prehistory of North Alaska. In D. Damas (ed.), *Handbook of North American Indians: Arctic*, Vol. 5: 80-93. Washington D. C.: Smithsonian Institution.
- Anderson, J. R. 2001. *Religion in Mind*. Cambridge University Press.
- Arutiunov, S. A. 2006. Prologue 2006. In S. A. Arutiunov & D. A. Sergeev *Ancient Cultures of the Asiatic Eskimos: The Uelen Cemetery*, pp. ix-xvii. Translated by R. L. Bland. Shared Beringian Heritage program, National Park Service, Alaska Regional Office.
- Arutiunov, S. A. 2009. The Enigma of Ancient Bering Strait Art. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 126-137. Princeton University Art Museum.
- Arutiunov, S. A. & Bronstein, M. M. 1985. The Problem of Distinguishing between Old Bering Sea and Okvik Ornamental Styles. *Jahrbuch des Bernischen Historischen Museums* Vol. 63-64: 17-21.

- Arutiunov, S. A. & Fitzhugh, W. W. 1988. Prehistory of Siberia and the Bering Sea. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 117-129. Smithsonian Institution.
- Arutiunov, S. A. & Sergeev, D. A. 2006[1969]. *Ancient Cultures of the Asiatic Eskimos: The Uelen Cemetery*. Translated by R. L. Bland. Shared Beringian Heritage Program, National Park Service, Alaska Regional Office.
- Arutiunov, S. A. & Sergeev, D. A. 2006[1975]. *Problems of Ethnic History in the Bering Sea: The Ekven Cemetery*. Translated by R. L. Bland. Shared Beringian Heritage Program, National Park Service, Alaska Regional Office.
- Atkinson, J. M. 1992. Shamanism Today. *Annual Review of Anthropology* Vol. 21: 307-330.
- Auger, E. E. 2005. *The Way of Inuit Art: Aesthetic and History in and Beyond the Arctic*. Jefferson & London: McFarland & Company, Inc.
- Bacigalupo, A. M. 1998. The Exorcizing Sounds of Warfare: The Performance of Shamanic Healing and the Struggle to Remain Mapuche. *Anthropology of Consciousness* Vol. 9(2): 1-16.
- Bacigalupo, A. M. 2004. The Mapuche Man Who Became a Woman: Selfhood, Gender Transgression, and Competing Cultural Norms. *American Ethnologists* Vol. 31(3): 440-457.
- Bahn, P. G. 1988. Comments. In Lewis- Williams, J. D. & Dowson. T. A., *The Signs of All Times: Entoptic Phenomena in Upper Palaeolithic Art [and Comments and Reply]*. *Current Anthropology*, Vol. 29: 217-218.
- Bahn, P. G. 1997. Membrane and Numb Brain: A Close Look at A Recent Claim for Shamanism in Paleolithic Art. *Rock Art Research* 14: 62-68.
- Bahn, P. G. 2001. Save the Last Trance for Me: An Assessment of the Misuse of Shamanism in Rock Art Studies. In H-P. Francfort & R. N. Hamayon (ed.), *The Concept of Shamanism: Uses and Abuses*, pp. 50-93. Budapest: Akadémiai Kiadó.

- Bahn, P. G. 2007. The Earliest Imagery around the Globe. In C. Renfrew & L. Morley (ed.), *Image and Imagination*, pp. 3-16. McDonald Institute of Archaeological Research, University of Cambridge.
- Bailey, D. 1996. The Interpretation of Figurines: the Emergence of Illusion and New Ways of Seeing. In Hamilton, N., Marcus, J., Bailey, D., Haaland, G., Haaland, R. and Ucko, P., *Can We Interpret Figurines? Cambridge Archaeological Journal* Vol. 6(2): 291-295.
- Balzer, M. M. (ed.). 1997. *Shamanic Worlds*. M. E. Sharpe, Inc.
- Bandi, H-G. 1995. Siberian Eskimos as Whalers and Warriors. In McCartney (ed.), *Hunting the Largest Animals: Native Whaling in the Western Arctic and Subarctic*, pp. 165-183. Edmonton: The Canadian Circumpolar Institute.
- Bandi, H-G. & Blumer, R. 2002. Investigations by Swiss Archaeologists on St. Lawrence Island, Alaska. In D. E. Dumond & R. L. Bland (ed.), *Archaeology in the Bering Strait Region*, pp. 25-59. University of Oregon Anthropological Papers No. 59.
- Barrett, J. 1981. Aspects of the Iron Age in Atlantic Scotland: A Case Study in the Problems of Archaeological Interpretation. *Proceeding of the Society of Antiquaries of Scotland* 111: 205-219.
- Barrett, J. 1991. Towards an Archaeology of Ritual. In P. Garwood, D. Jennings, R. Skeates & J. Toms (ed.), *Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion*. Oxford, 1989. Oxford: Oxford University Committee for Archaeology, Monographs No. 32: 1-9.
- Barrett, J. 1994. *Fragments from Antiquity: An Archaeology of Social Life in Britain, 2900-1200 BC*. Oxford, UK: Blackwell.
- Barthes, R. 1968. *Elements of Semiology*. New York: Hill and Wang.
- Barthes, R. 1972. *Mythologies*. New York: Hill and Wang.
- Basilov, V. N. 1978. Vestiges of Transvestism in Central-Asian Shamanism. In V. Diószegi & M. Hoppál (ed.), *Shamanism in Siberia*, pp. 281-289. Budapest: Akadémiai Kiadó.

- Bednarik, R. G. 2001. Pleistocene Rock Art in Australia. *Anthropos* Vol. 105: 3-12.
- Bertemes, F. & Biehl, P. E. 2001. The Archaeology of Cult and Religion: An Introduction. In P. F. Biehl & F. Bertemes (ed.), *The Archaeology of Cult and Religion*, pp. 11-24. Archaeolingua.
- Binford, L. R. 1962. Archaeology as Anthropology. *American Antiquity* Vol. 28: 217-225.
- Binford, L. R. 1965. Archaeological Systematics and the Study of Culture Process. *American Antiquity* Vol. 31: 203-210.
- Birket-Smith, K. 1953. *The Chugach Eskimo*. Copenhagen: Nationalmusets Skrifter. Etnografisk Række, Vol. 6.
- Birket-Smith, K. 1959. *The Eskimos*. London: Methuen.
- Black, L. T. 1991. *Glory Remembered: Wooden Headgear of Alaska Sea Hunters*. Alaska State Museums.
- Black, L. T. 2003. *Aleut Art*. The Donning Company Publishers.
- Blackburn, T. 1977. Biopsychological Aspects of Chumash Rock Art. *Journal of California Anthropology* 4 (1): 88-94.
- Blodgett, J. 1978. The Coming and Going of the Shaman: Eskimo Shamanism and Art. The Winnipeg Art Gallery.
- Bogoras, W. 1904-1909. *The Chukchee*. Publications of the Jesup North Pacific Expedition Vol. VII. Memoirs of the American Museum of Natural History XI.
- Bondi, H-G & Blumer, R. 2002. Investigations by Swiss Archaeologists on St. Lawrence Island, Alaska. In D. E. Dumond & R. L. Bland (ed.), *Archaeology in the Bering Strait Region*, pp. 25-59. University of Oregon Anthropological Papers No. 59.
- Bourdieu, P. 1977. *Outline of A Theory of Practice*. Cambridge University press.
- Bourdieu, P. 1990. *The Logic of Practice*. Stanford: Stanford University Press.
- Borić, D. 2007. Images of Animality: Hybrid Bodies and Mimesis in Early Prehistoric Art. In C. Renfrew & L. Morley (ed.), *Image and Imagination*, pp. 83-99. McDonald Institute of Archaeological Research, University of Cambridge.
- Boyd, C. E. 1996. Shamanic Journeys into the Otherworld of the Archaic Chichimec. *Latin American Antiquity* Vol. 7(2): 152-164.

- Boyer, P. 2000. Evolution of the Modern Mind and Origins of Culture: Religious Concepts as a Limiting-Case. In P. Carruthers & A. Chamberlain (ed.), *Evolution and the Human Mind*, pp. 93-112. Cambridge University Press.
- Boyer, P. 2001. *Religion Explained: the Human Instincts That Fashion Gods, Spirits and Ancestors*. Basic Books.
- Boyer, P. 2002. *Religion Explained: the Evolutionary origins of Religious thought*. Basic Books.
- Bradley, R. 1989. Deaths and Entrances: A Contextual Analysis of Megalithic Art. *Current Anthropology* Vol. 30 (1): 68-75.
- Braithwaite, M. 1982. Decoration as Ritual Symbol: A Theoretical Proposal and an Ethnographic Study in Southern Sudan. In I. Hodder, (ed.), *Symbolic and Structural Archaeology*, pp. 80-88. Cambridge University Press.
- Breuil, A. H. 1952. *Four Hundred of Centuries of Cave Art*. Fernand Windels.
- Broekman, J. M. 1974. *Structuralism: Moscow, Prague, Paris*. Dordrecht. Holland: D. Reidel Publishing Company.
- Bronshtein, M. M. 2006. Variability in Ancient Eskimo Graphic Designs: On the Problem of the Ethnic and Cultural History of the Bering Sea from the 1<sup>st</sup> Millennium B. C. to 1<sup>st</sup> Millennium A. D. *Alaska Journal of Anthropology* Vol. 4(1-2): 162-175.
- Bronshtein, M. M. 2009. Early Eskimo Art from Ekven and Bering Strait. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 138-161. Princeton University Art Museum.
- Bronstein, M. M. & Dneprovsky, K. A. 2009. Archaeology at Ekven, Chukotka. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 94-109. Princeton University Art Museum.
- Campbell, E. 2000. The Raw, the Cooked and the Burnt: Interpretations of Food and Animals in the Hebridean Iron Age. *Archaeological Dialogues* 7: 185-198.

- Campbell, T. N. 1958. Origin of the Mescal Bean Cult. *American Anthropologist* Vol. 60: 156-160.
- Cauvin, J. 2000. *The Birth of the Gods and the Origins of Agricultures*. Cambridge University Press.
- Chang, K. C. 1967. Major Aspects of the Interrelationship of Archaeology and Ethnology. *Current Anthropology* Vol. 8(3): 227-243.
- Chang, K. C. 1981. The Animal in Shang and Chou Bronze Art. *Harvard Journal of Asiatic Studies* Vol. 41(2): 527-554.
- Chang, K. C. 1983. *Art, Myth, and Ritual: The Path to Political Authority in Ancient China*. Cambridge & London: Harvard University Press.
- Chang, K. C. (Zhang Guangzhi). 1986. *Kaoguxue zhuanli liu jiang*. Beijing: Wenwu chubanshe.
- Chang, K. C. 1992. The Circumpacific Substratum of Ancient Chinese Civilization. In C. M. & S. N. Rhee (ed.), *Pacific Northeast Asia in Prehistory*, pp. 217-221. Washington State University Press.
- Chaussonnet, V. 1988. Needles and Animals: Women's Magic. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 209-226. Smithsonian Institution.
- Clottes, J. and Lewis-Williams, J.D. 1998. *The Shamans of Prehistory: Trance and Magic in the Painted Caves*. Abrams Press.
- Collins, H. B. 1937. *Archaeology of St. Lawrence Island, Alaska*. Smithsonian Miscellaneous Collections 96(1).
- Collins, H. B. 1969. Okvik Figurine: Madonna or Bear Mother? *Folk* Vol. 11-12: 125-132.
- Collins, H. B. 1971. Composite Masks: Chinese and Eskimo. *Anthropologica* Vol. 13(1/2): 271-278.

- Collins, H. B. 1973. Eskimo Art. In H. B. Collins, F. de Laguna, E. Carpenter & P. Stone (ed.), *The Far North: 2000 Years of American Eskimo and Indian Art*, pp. 1-25. Washington D. C.: National Gallery of Art.
- Conkey, M. W. 1982. Boundedness in Art and Society. In I. Hodder (ed.), *Symbolic and Structural Archaeology*, pp. 115-128. Cambridge University Press.
- Conkey, M. W. 1985. Ritual Communication, Social Elaboration, and the Variable Trajectories of Paleolithic Material Culture. In T. D. Price & J. Brown (ed.), *Prehistoric Hunter-Gatherers: The Emergence of Cultural Complexity*, pp. 299-323. New York: Academic.
- Conkey, M. W. 1987. New Approaches in the Search for Meaning? A Review of Research in "Paleolithic Art." *Journal of Field Archaeology* Vol. 14: 413-430.
- Conkey, M. W. 1989. The Structural Analysis of Paleolithic Art. In C. C. Lamberg-Karlovsky (ed.), *Archaeological Thought in America*, pp. 135-154. Cambridge University Press.
- Conkey, M. W. 1999. A History of Interpretation of European 'Palaeolithic Art': Magic, Mythogram and Metaphors for Modernity. In A. Lock & C. R. Peters (ed.), *Handbook of Human Symbolic Evolution*, pp. 288-349. Oxford: Black Wells.
- Conkey, M. W. 2001. Structural and Semiotic Approaches. In D. S. Whitley (ed.), *Handbook of Rock Art Research*, pp. 273-310. Walnut Creek, Lanham, New York, & Oxford: Altamira Press.
- Connor, L. H. & Samuel, G. 2001. *Healing Powers and Modernity: Traditional Medicines, Shamanism, and Science in Asian Societies*. Bergin & Garvey.
- Crowell, A. L. 2009. Sea Mammals in Art, Ceremony, and Belief: Knowledge Shared by Yupik and Iñupiaq Elders. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 206-225. Princeton University Art Museum.
- Crowley, J. L. 1992. The Icon Imperative: Rules of Composition in Aegean Art. In R. Laffineur & J. L. Crowley (ed.), *Eikon: Aegean Bronze Age iconography : Shaping a*

- Methodology : Proceedings of the 4th International Aegean Conference/4e Rencontre ég éenne internationale, University of Tasmania, Hobart, Australia, 6-9 April 1992*, pp. 23-36. Universit éde Li ège, Histoire de l'art et arch éologie de la Gr èce antique.
- Curtis, E. S. 1930. *The Alaskan Eskimos*. Classic Books Company.
- Czaplicka, M. A. 1914. *Aboriginal Siberia*. London, Edinburgh, Glasgow, New York, Toronto, Melbourne & Bombay: Oxford University Press.
- Dall, W. H. 1878. *On the Remains of Later Prehistoric Man Obtained from Caves in the Catherina Archipelago, Alaska Territory, and Especially from the Caves of the Aleutian Islands*, Vol. 22. Art. 6. Washington D. C.: Smithsonian Contributions to Knowledge.
- D'Anglure, B. S. 2009. Shamanism. In A. Barnard & J. Spencer (ed.), *Encyclopedia of Social and Cultural Anthropology Second Edition*, pp. 638-642. London & New York: Routledge.
- Davis, W. 1988. Comments. In Lewis- Williams, J. D. & Dowson. T. A., *The Signs of All Times: Entoptic Phenomena in Upper Palaeolithic Art [and Comments and Reply]*. *Current Antyhropology*, Vol. 29: 222-224.
- Deacon, T. W. 1997. *The Symbolic Species*. W. W. Norton.
- de Beaune, S. A., Coolidge, F. L. & Wynn, T. (ed.). 2009. *Cognitive Archaeology and Human Evolution*. Cambridge University Press.
- d'Errico, F., Henshilwood, C. & Nilssen, P. 2001. An Engraved Bone Fragment from c. 70,000 – Year Old Middle Stone Age Levels at Blombos Cave, South Africa: Implications for the Origins and Language. *Antiquity* 75: 309-318.
- de Montellano, O. 1990. *Aztec Medicine, Health, and Nutrition*. New Brunswick: Rutgers University Press.
- Devlet, E. 2000. X-Ray Style Anthropomorphic Rock Art Images and the Mythological Subject of Obtaining the Gift of Shamanizing. *Archaeology, Ethnology and Anthropology of Eurasia* Vol. 2(2): 88-95.



- Devlet, E. 2001. Rock Art and the Material Culture of Siberian and Central Asian Shamanism. In N. S. Price (ed.), *The Archaeology of Shamanism*, pp. 43-54. London & New York: Routledge.
- D áz-Andreu, M. 2001. An All-Embracing Universal Hunter-Gathering Religion? Discussing Shamanism and Levantine Rock-Art. In H-P. Francfort & R. N. Hamayon (ed.), *The Concept of Shamanism: Uses and Abuses*, pp. 117-133. Budapest: Akadémiai Kiadó
- D áz-Andreu, M., Price, M. & Gosden, C. 2009. Christopher Hawkes: His Archive and Networks in British and European Archaeology. *The Antiquaries Journal* 89: 405-426.
- Di ószegi, V. 1968. *Tracing Shamans in Siberia*. Oosterhout, the Netherlands: Anthropological Publications.
- Di ószegi, V. & Hopp á, M. (ed.). 1978. *Shamanism in Siberia*. Budapest: Akadémiai Kiadó
- Dikov, N. 2004[1979]. *Early Cultures of Northeast Asia*. Translated by R. L. Bland. Shared Beringian Heritage Program, National Park Service, Alaska Regional Office.
- Dolitsky, A. B. 2000. *Tales and Legends of the Yupik Eskimos of Siberia*. Translated by H. N. Michael. Juneau: Alaska-Siberia Research Center.
- Donald, M. 1991. *Origins of the Modern Mind*. Harvard University Press.
- Donald, M. 2009. The Roots of Art and Religion in Ancient Material. In C. Renfrew & I. Morley (ed.), *Becoming Human*, pp. 95-103. Cambridge University Press.
- Dronfield, J. 1995. Subjective Vision and the Source of Irish Megalithic Art. *Antiquity* Vol. 69: 539-549.
- Dronfield, J. 1996. The Vision Thing: Diagnosis of Endogenous Derivation in Abstract Arts. *Current Anthropology* Vol. 37(2): 373-391.
- Dubois, T. A. 2009. *An Introduction to Shamanism*. Cambridge University Press.
- Dubois, T. A. 2011. Trends in Contemporary Research on Shamanism. *Numen* Vol. 58(1): 100-128.
- Dumond, D. E. 1977. *The Eskimos and Aleuts*. London: Thames and Hudson.

- Dumond, D. E. 1984. Prehistory: Summary. In D. Damas (ed.), *Arctic*, pp. 72-79. Washington D. C.: Smithsonian Institution.
- Dumond, D. E. 1998. *The Hillside Site, St. Lawrence: Alaska. An Examination of collections from the 1930's*. University of Oregon Anthropological Papers No. 55. Oregon State Museum of Anthropology and the Department of Anthropology, University of Oregon, Eugene.
- Dumond, D. E. 2009. Chronology of Bering Strait Cultures. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 70-77. Princeton University Art Museum.
- Dumond, D. E. & Bland, R. L. 2002. Introduction. In D. E. Dumond & R. L. Bland (ed.), *Archaeology in the Bering Strait Region*, pp. 1-6. University of Oregon Anthropological Papers No. 59.
- Durrant, S. W. 1979. The Nišan Shaman Caught in Cultural Contradiction. *Signs* Vol. 5, No. 2: 338-347.
- Edson, G. 2009. Shamanism: A Cross-Cultural Study of Beliefs and Practices. McFarland Company.
- Eliade, M. 2004[1964]. Shamanism: Archaic Techniques of Ecstasy. Princeton: Princeton University Press.
- Fair, S. W. 1982. Eskimo Dolls. In S. Jones (ed.), *Eskimo dolls*, pp. 45-71. Anchorage: Alaska State Council on the Arts.
- Fienup-Riordan, A. 1988. Eye of the Dance: Spiritual Life of the Bering Sea Eskimo. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 256-270. Smithsonian Institution.
- Fienup-Riordan, A. 1990. *Eskimo Essays: Yup'ik Lives and How We See Them*. New Brunswick & London: Rutgers University Press.
- Fienup-Riordan, A. 1994. *Boundaries and Passages: Rule and Ritual in Yup'ik Eskimo oral Tradition*. Norman: University of Oklahoma Press.
- Fienup-Riordan, A. 1996. *The Living Tradition of Yup'ik Masks: Agayuliyararput (Our Way of Making Prayer)*. Seattle: University of Washington Press.

- Fienup-Riordan, A. 2005. *Yup'ik Elders at the Ethnologisches Museum Berlin: Fieldwork Turned on Its Head*. Seattle: University of Washington press.
- Fienup-Riordan, A. 2007. Yuungnaqpiallerput. *The Way We Genuinely Live: Masterworks of Yup'ik Science and Survival*. Seattle: University of Washington press.
- Fitzhugh, W. W. 1988a. Comparative Art of the North Pacific Rim. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 294-312. Smithsonian Institution.
- Fitzhugh, W. W. 1988b. Eskimos: Hunters of the Frozen Coasts. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 42-51. Smithsonian Institution.
- Fitzhugh, W. W. 1994. Crossroads of Continents: Review and Prospect. In W. W. Fitzhugh & V. Chaussonnet (ed.), *Anthropology of the North Pacific Rim*, pp. 27-51. Washington & London: Smithsonian Institution Press.
- Fitzhugh, W. W. 2009a. Eagles, Beasts, and Gods: Art of the Old Bering Sea Hunting Complex. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 162-189. Princeton University Art Museum.
- Fitzhugh, W. W. 2009b. Notes on Art Styles, Cultures, and Chronology. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 88-93. Princeton University Art Museum.
- Fitzhugh, W. W. & Crowell, A. L. 2009. Ancestors and Ivories: Ancient Art of Bering Strait. In W. W. Fitzhugh, J. Hollowell, & A. L. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 18-41. Princeton University Art Museum.
- Fitzhugh, W. W. & Kaplan, S. A. 1982. *Inua: Spirit World of the Bering Sea Eskimo*. Washington, D. C.: Smithsonian Institution Press.
- Flaherty, G. 1992. *Shamanism and the Eighteenth Century*. Princeton, New Jersey: Princeton University Press.

- Flannery, K. V. & Marcus. J. 1976. Formative Oaxaca and the Zapotec Cosmos. *American Scientist* 64: 374-383.
- Flannery, K. V. and Marcus. J. 1993. Cognitive Archaeology. *Cambridge Archaeology Journal* 3: 260-270.
- Flannery, K. V. and Marcus. J. 1998. Cognitive Archaeology. In Whitley, D. S (ed.), *Readers in Archaeological Theory: Post-Processual and Cognitive Approaches*, pp. 35-48. Routledge.
- Fogelin, L. 2007. The Archaeology of Religious Ritual. *Annual Review Anthropology* 36: 55-71.
- Fogelin, L. 2008. Delegitimizing Religion: The Archaeology of Religion as ... Archaeology. In D. S. Whitley & K. Hays-Gilpin (ed.), *Belief in the Past*, pp. 129-141. Walnut Creek, California: Left Coast Press
- Ford, J. A. 1959. Eskimo Prehistory in the Vicinity of Point Barrow, Alaska. *Anthropological Papers of the Museum of Natural History*, Vol. 47(1). New York.
- Frazer, J. G. 1887. *Totemism*. Edinburgh: Adam & Charles Black.
- Francfort, H-P. 2001. Art, Archaeology and the Prehistories of Shamanism in Inner Asia. In H-P. Francfort & R. N. Hamayon (ed.), *The Concept of Shamanism: Uses and Abuses*, pp. 243-276. Budapest: Akadémiai Kiadó
- Freidel, D., Schele, F. & Parker, J. 1993. *Maya Cosmos: Three Thousand Years on the Shaman's Path*. New York: Morrow.
- Friedrich, M. H. 1970. Design Structure and Social Interaction: Archaeological Implications of an Ethnographic Analysis. *American Antiquity* 35: 332-343.
- Fu, Yuguang (富育光). 1990. *Samanjiao yu shenhua*. Shenyang: Liaoning University Press.
- Fu, Yuguang (富育光). 1993. The Worldview of the Manchu Shamanism. In M. Hoppál & K. D. Howard (ed.), *Shamans and Cultures*, pp. 240-248. Budapest: Akadémiai Kiadó
- Furst, P. T. 1965. West Mexican Tomb Sculpture as Evidence for Shamanism in Prehispanic Mesoamerica. *Antropológica* 15: 29-60.

- Furst, P. T. 1968. The Olmec Were-Jaguar Motif in the Light of Ethnographic Reality. In E. P. Benson (ed.), *Dumbarton Oaks Conference on the Olmec*, pp. 143-174. Washington, DC: Dumbarton Oaks Research Library and Collection.
- Furst, P. T. (ed.). 1972. *Flesh of the Gods: The Ritual Use of Hallucinogens*. New York & Washington: Praeger Publishers.
- Furst, P. T. 1976a. *Hallucinogens and Culture*. San Francisco: Chandler & Sharp.
- Furst, P. T. 1976b. Shamanistic Survivals in Mesoamerican Religion. *Actas, XLI Congreso Internacional de Americanistas, México, 2 al 7 de septiembre de 1974* Vol.2: 151-157.
- Furst, P. T. 2007. *Visions of a Huichol Shaman*. Philadelphia: University of Pennsylvania Press.
- Gamble, C. 1982. Interaction and Alliance in Paleolithic Society. *Man* (NS) Vol. 17: 92-107.
- Gerlach, S. C. & Mason, O. K. 1992. Calibrated Radiocarbon Dates and Cultural Interaction in the Western Arctic. *Arctic Anthropology* Vol. 29:54-81.
- Geist, O. & Rainey, F. 1936. *Archaeological Excavations at Kukulik, St. Lawrence Island, Alaska*. Volume II, Miscellaneous Public. Washington D. C.: University of Alaska Government Printing Office.
- Giddens, A. 1979. *Central Problems in Social Theory*. Berkley and Los Angeles: Univeristy of California Press.
- Giddings, J. L. 1964. *The Archaeology of Cape Denbigh*. Providence: Brown University Press.
- Giddings, J. L. 1967. *Ancient Men of the Arctic*. New York: Alfred A. Knopf.
- Giddings, J. L. & Anderson, D. D. 1986. *Beach Ridge Archaeology of Cape Krusenstern: Eskimo and Pre-Eskimo Settlements around Kotzebue Sound, Alaska*. Washington D.C.: National Park Service U.S. Department of Interior.
- Gilberg, R. 1984. How to Recognize a Shaman among Other Religious Specialists? In M. Hoppál (ed.), *Shamanism in Eurasia*, Part 1: 21-27. Göttingen, Germany: Edition Herodot.

- Gimbutas, M. 1982. *The Goddesses and the Gods of Old Europe*. Berkley & Los Angeles: University of California Press.
- Gimbutas, M. 1989. *The Language of the Goddess*, Thames & Hudson.
- Gimbutas, M. 1991. *The Civilization of the Goddess*. San Francisco: Harper.
- Glassie, H. 1975. *Folk Housing in Middle Virginia: A Structural Analysis of Historic Artifact*. Knoxville: University of Tennessee Press.
- Gosden, C. 1994. *Social Being and Time*. London: Blackwell.
- Grant, C. 1965. *The Rock Paintings of the Chumash*. Berkeley: University of California Press.
- Grant, C. 1967. *Rock Art of the American Indian*. New York: Promotory Press.
- Grim, J. A. 1983. *The Shaman: Patterns of Siberian and Ojibway Healing*. Norton: University of Oklahoma Press.
- Gubser, N. J. 1965. *Nunamiut Eskimos: Hunters of Caribou*. New Haven & London: Yale University Press.
- Guthrie, R. D. 2005. *The Nature of Paleolithic Art*. Chicago & London: The University of Chicago Press.
- Halifax, J. 1982. *Shaman: The Wounded Healer*. New York: Crossroad.
- Hall, R. L. 1977. An Anthropocentric Perspective for Eastern United States Prehistory. *American Antiquity* Vol. 42. No. 4: 499-518.
- Hamayon, R. N. 1998. 'Ecstasy' or the West-Dreamt Siberian Shaman. In H. Wautischer (ed.), *Tribal Epistemologies*, pp. 175-187. Aldershot, Ashgate (Averbury Series in Philosophy).
- Hamayon, R. N. 2004. History of the Study of Shamanism. In M. N. Walter & E. J. N. Fridman (ed.), *Shamanism: An Encyclopedia of World Beliefs, Practices, and Culture*, Vol. 1: 142-147. Santa Barbara, Denver & Oxford: ABC-CLIO.
- Hamilton, N., Marcus, J., Bailey, D., Haaland, G., Haaland, R. & Ucko, P. 1996. Can We Interpret Figurines? *Cambridge Archaeological Journal* 6(2): 281-307.

- Hastorf, C. A. 2007. Archaeological Andean Rituals: Performance, Liturgy, and Meaning. In E. Kyriakidis (ed.), *The Archaeology of Ritual*, pp. 77-107. The Cotsen Institute of Archaeology.
- Hardin, M. A. 1983. The Structure of Tarascan Pottery Painting. In D. K. Washburn (ed.), *Structure and Cognition in Art*, pp. 8-24. Cambridge: Cambridge University Press.
- Harner, M. J. 1973a. Introduction. In M. J. Harner (ed.), *Hallucinogens and Shamanism*, pp. xi-xv. New York: Oxford University Press.
- Harner, M. J. 1973b. Common Themes in South American Indian Yagé Experience. In M. J. Harner (ed.), *Hallucinogens and Shamanism*, pp. 155-175. New York: Oxford University Press.
- Harner, M. J. (ed.). 1973c. *Hallucinogens and Shamanism*. New York: Oxford University Press.
- Harner, M. J. 1980. *The Way of the Shaman: A Guide to Power and Healing*. Harper & Row.
- Harner, M. J. 1986. *The Way of the Shaman: A Guide to Power and Healing*. Harper & Row.
- Harner, M. J. 1988. What is a Shaman? In G. Door (ed.), *Shaman's Path: Healing, Personal Growth, & Empowerment*, pp. 7-15. Boston & London: Shambhala.
- Harvey, G. 2006. *Animism: Respecting the Living World*. New York: Columbia University Press.
- Hawkes, C. 1954. Archaeological Theory and Method: Some Suggestions from the Old World. *American Anthropologists* Vol. 2, No. 2: 155-168.
- Hawkes, E. W. 1913. *The "Living-In" Feast of the Alaska Eskimo*. Canada Department of Mines, Anthropological Series, No. 3. Ottawa: Government Printing Bureau.
- Hawkes, E. W. 1914. *The Dance Festivals of the Alaskan Eskimo*. Philadelphia: The University Museum, University of Pennsylvania.
- Hawkes, J. 1968. *Dawn of the Gods*. New York: Random House.
- Hayden, B. 2003. *Shamans, Sorcerers, and Saints: A Prehistory of Religion*. Washington: Smithsonian Books.

- Hedges, K. 1976. Southern California Rock Art as Shamanic Art. *American Indian Rock Art* 2: 126-138.
- Hedges, K. 1983. The Shamanic Origins of Rock Art. In Jo A. V. Tilburg (ed.), *Ancient Images on Stone*, pp. 46-61. Los Angeles: University of California Institute of Archaeology.
- Heinze, R-I. 1989. Who Are the Shamans of the Twentieth Century? In M. Hoppál & O. von Sádovszky (ed.), *Shamanism: Past and Present*, Part 2: 355-361. Ethnographic Institute, Hungarian Academy of Sciences.
- Heizer, R.F. & Baumhoff, M.A. 1962. *Prehistoric Rock Art of Nevada and Eastern California*. Berkley & Los Angeles: University of California Press.
- Henare, A., M. Holbraad & S. Wastell (ed.). 2007. *Thinking Through Things: Theorising Artefacts Ethnographically*. London: Routledge.
- Himmelheber, H. 1953. *Eskimokünstler: Ergebnisse einer Reise in Alaska*. Eisenach: Erich Röth Verlag.
- Himmelheber, H. 1993. *Eskimo Artists*. Fairbanks: University of Alaska Press.
- Himmelheber, H. 2000. *Where the Echo Began*. Fairbanks: University of Alaska Press.
- Hinde, R. A. 2007. The Worship and Destruction of Images. In C. Renfrew & L. Morley (ed.), *Image and Imagination*, pp. 323-331. McDonald Institute of Archaeological Research, University of Cambridge.
- Hodder, I. (ed.). 1982a. *Symbolic and Structural Archaeology*. Cambridge University Press.
- Hodder, I. 1982b. Theoretical Archaeology: A Reactionary View. In Hodder, I. (ed.), *Symbolic and Structural Archaeology*, pp.1-16. Cambridge University Press.
- Hodder, I. 1982c. *Symbols in Actions*. Cambridge University Press.
- Hodder, I. 1989. *The Meanings of Things*. London: Unwin Hyman.
- Hodder, I. 1990. *The Domestication of Europe*. London: Blackwell.
- Hodder, I. 2000. Symbolism, Meaning and Context. In J. Thomas (ed.), *Interpretive Archaeology*, pp. 86-96. London and New York: Leicester University Press.



- Hodder, I. 2005. Symbolic and Structural Archaeology. In C. Renfrew and P. Bahn (ed.), *Archaeology: The Key Concepts*, pp. 190-193. London and New York: Routledge.
- Hodder, I. & Hutson, S. 2003. *Reading the Past*. Cambridge University Press.
- Hodgson, D. 2000. Shamanism, Phosphores, and Early art: An Alternative Synthesis. *Current Anthropology* Vol. 41(5): 866-873.
- Hollinger, R. E., Ousley, S. & Utermohle, C. 2009. The Thule Migration: A New Look at the Archaeology and Biology of the Point Barrow Region Population. In H. Maschner, O. Mason & R. McGhee (ed.), *The Northern World AD 900—1400*, pp. 131-154. Salt Lake City: The University of Utah Press.
- Holmberg, U. 1964[1912]. *The Mythology of All Races: Finno-Ugric, Siberian*. Marshall Jones.
- Holmberg, D. H. 1989. *Order in Paradox: Myth, Ritual, and Exchange among Nepal's Tamang*. Ithaca: Cornell University Press.
- Hoppál, M. (ed.). 1984. *Shamanism in Eurasia*. Göttingen, Germany: Edition Herodot.
- Hoppál, M. 1992a. Pain in Shamanic Initiation. In M. Hoppál & J. Pentikäinen (ed.), *Northern Religions and Shamanism*, Part 1: 151-157. Budapest: Akadémiai Kiadó.
- Hoppál, M. 1992b. On the Origin of Shamanism and the Siberian Rock Art. In A-L. Siikala & M. Hoppál, *Studies on Shamanism*, pp. 132-149. Helsinki: Finnish Anthropological Society & Budapest: Akadémiai Kiadó.
- Hoppál, M. 1993. Shamanism: Universal Structures and Regional Symbols. In M. Hoppál & K. D. Howard (ed.), *Shamans and Cultures*, pp. 181-192. Budapest: Akadémiai Kiadó.
- Hoppál, M. 2001. Cosmic Symbolism in Siberian Shamanhood. In J. Pentikäinen (ed.), *Shamanhood Symbolism and Epic*, pp. 75-87. Budapest: Akadémiai Kiadó.
- Hughes, J. M. 1960. *An Eskimo Village in the Modern World*. Ithaca & New York: Cornell University Press.
- Hultkrantz, Å. 1957. *The North American Indian Orpheus Tradition*. Stockholm: Ethnographical Museum of Sweden, Monograph Ser., No. 2.
- Hultkrantz, Å. 1973. A Definition of Shamanism. *Temenos* 9: 25-37.

- Hultkrantz, Å. 1978. Ecological and Phenomenological Aspects of Shamanism. In V. Di ószegi & M. Hopp á (ed.), *Shamanism in Siberia*, pp. 27-58. Budapest: Akad émiai Kiadó
- Hultkrantz, A. 1996. A New Look at the World Pillar in Arctic and Sub-Arctic Religions. In J. Pentik änen (ed.), *Shamanism and Northern Ecology*, pp. 31-49. Berlin & New York: Mouton de Gruyter.
- Humphrey, C. & Onon U. 1996. *Shamans and Elders: Experience, Knowledge and Power among the Daur Mongols*. Clarendon Press.
- Hutton, R. 2001. *Shamans: Siberian Spirituality and the Western Imagination*. London & New York : Hambledon and London.
- Ingold, T. 2006. Rethinking the Animate, Re-Animating Thought. *Ethnos* Vol. 71(1): 9-20.
- Ingold, T. 2007. Materials against Materiality. *Archaeological Dialogues* Vol. 14(1): 1-16.
- Ingold, T. 2010. Bring Things to Life: Creative Entanglements in A World of Materials. *Realities*, <http://www.socialsciences.manchester.ac.uk>.
- Insoll, T. 2004 *Archaeology, Ritual, Religion*. London & New York: Routledge.
- Ivanov, S. V. 1991. Aleut Hunting Headgear and Its Ornamentation. In L. T. Black, *Glory Remembered: Wooden Headgear of Alaska Sea Hunters*, pp. 111-152. Alaska State Museums.
- James, E.O. 1959. *The Cult of the Mother-Goddess: An Archaeological and Documentary Study*. London: Thames and Hudson.
- Jankovics, M. 1984. Cosmic Models and Siberian Shaman Drums. In M. Hopp á (ed.), *Shamanism in Eurasia*, Part 1: 149-173. Göttingen, Germany: Edition Herodot.
- Jenness, D. 1928. Archaeological Investigations in Bering Strait, 1926. In *National Museum of Canada, Annual Report for 1926*, pp. 71-80. Canada Department of Mines, Bulletin 50. Ottawa.
- Jochelson, W. 1908. *The Koryak*. Publications of the Jesup North Pacific Expedition Vol. VI. Memoirs of the American Museum of Natural History XI.

- Jochim, M. 1983. Paleolithic Cave Art: Some Ecological Speculations. In G. Bailey (ed.), *Hunter-gatherer Economy in Prehistory: A European Perspective*, pp. 212-219. Cambridge University Press.
- Johnson, M. 1999. *Archaeological Theory: An Introduction*. Blackwell.
- Jokic, Z. 2008. Yanomami Shamanic Initiation: The Meaning of Death and Postmortem Consciousness in Transformation. *Anthropology of Consciousness* Vol. 19(1): 33-59.
- Jolles, C. Z. & Dyachkova, G. 2009. Artists and Contemporary Life. In W. W. Fitzhugh, J. Hollowell & A. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 240-251. Princeton University Art Museum.
- Jonaitis, A. (ed.). 1998. *Looking North: Art from University of Alaska Museum*. Seattle & London: University of Washington Press.
- Kaplan, S. A. & Barsness, K. J. 1986. *Raven's Journey: The World of Alaska's Native People*. The University Museum, University of Pennsylvania.
- Kaplan, S. A., Jordan, R. H. & Sheehan, G. W. 1984. An Eskimo Whaling Outfit from Sledge Island, Alaska. *Expedition* Vol. 26(2): 16-23.
- Kehoe, A. B. 1996. Eliade And Hultkrantz: The European Primitivism Tradition. *American Indian Quarterly* Vol. 20 (3/4): 377-392.
- Kehoe, A. B. 2000. *Shamanism and Religion: An Anthropological Exploration in Critical Thinking*. Waveland Press.
- Kehoe, A. B. & Kehoe, T. E. 1973. Cognitive Models for Archaeological Interpretation. *American Antiquity* Vol. 38: 150-154.
- Kenin-Lopsan, M. 1997. *Shamanic Songs and Myths of Tuva*. Budapest: Akadémiai Kiadó
- Keyser, J. D. & Whitley, D. S. 2006. Sympathetic Magic in Western North American Rock Art. *American Antiquity* Vol. 71: 3-26.
- Kim, T. & Hoppál, M. (ed.). 1995. *Shamanism in Performance Arts*. Budapest: Akadémiai Kiadó
- King, B. J. (ed.). 1999. *The Origins of Language*. Santa Fe: School of America Research Press.

- Klein, C. F., Guzmán, E., Mandell, E. C., & Stanfield-Mazzi, M. 2002. The Role of Shamanism in Mesoamerican Art. *Current Anthropology* Vol. 43(3): 383-419.
- Konovalov, A. 2006. *Between Worlds: Shamanism of the Peoples of Siberia*. Moscow: Khudozhnik I Kniga.
- Krader, L. 1978. Shamanism : Theory and History in Buryat Society. In V. Di ószegi & M. Hopp á (ed.), *Shamanism in Siberia*, pp. 181-236. Budapest: Akadémiai Kiadó.
- Krutak, L. 2009. Of Human Skin and Ivory Spirits: Tattooing and Carving in Bering Strait. In W. W. Fitzhugh, J. Hollowell & A. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 190-203. Princeton University Art Museum.
- Kuz'mina, L. P. 1994. The Jessup North Pacific Expedition: A History of Russian-American Cooperation. In W. W. Fitzhugh & V. Chaussonnet (ed.), *Anthropology of the North Pacific Rim*, pp. 63-77. Washington & London: Smithsonian Institution Press.
- Kyriakidis, E. 2007. Archaeologies of Ritual. In E. Kyriakidis (ed.), *The Archaeology of Ritual*, pp. 289-308. The Cotsen Institute of Archaeology.
- Laderman, C. & Roseman, M. (ed.). 1995. *The Performance of Healing*. New York: Routledge.
- LaMotta, V. M. & Schiffer, M. B. 2001. Behavioral Archaeology: Toward a New Synthesis. In Hodder, I. (ed.), *Archaeological Theory Today*. Polity.
- Lang, S. 1998. *Men as Women, Women as Men*. Austin: University of Texas Press.
- Lantherp, D. W. 1983. Recent Shipibo-Conibo Ceramics and Their Implications for Archaeological Interpretation. In D. K. Washburn (ed.), *Structure and Cognition in Art*, pp. 25-39. Cambridge: Cambridge University Press.
- Lantis, M. 1946. *The Social Culture of the Nunivak Eskimo*. The American Philosophical Society. Lancaster, PA: Lancaster Press.
- Lantis, M. 1947. *Alaskan Eskimo Ceremonialism*. New York: J. J. Augustin Publisher.
- Lantis, M. 1950. The Religion of the Eskimo. In Ferm, V. (ed.), *Forgotten Religions, Including Some Living Primitive Religions*, pp. 309-339. New York: The Philosophical Library.

- Larsen, H. & Rainey, F. 1948. *Ipiutak and the Arctic Whale Hunting Culture*. Anthropological Papers No. 42. New York: American Museum of Natural History.
- Larson, M.A. 1995. And Then There Were None: The “Disappearance” of the Qarqi in Northern Alaska. In McCartney (ed.), *Hunting the Largest Animals: Native Whaling in the Western Arctic and Subarctic*, pp. 207-220. Edmonton: The Canadian Circumpolar Institute.
- Latour, B. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Laufer, B. 1917. Origin of the Word Shaman. *American Anthropologists* Vol. 19, No. 3: 361-371.
- Leach, E. 1973. Concluding Addresses. In C. Renfrew (ed.), *Explanation of Culture Change*, pp. 761-771. London: Duckworth.
- Leach, E. 1976. *Culture and Communication: The Logic by Which Symbols Are Connected*. Cambridge University Press.
- Leary, T. 1997. *Psychedelic Prayers and Other Meditations*. Berkeley, California: Robin Publishing Co.
- Leroi-Gourhan, A. 1965. *Treasures of Prehistoric Art*. New York: Abrams.
- Leroi-Gourhan, A. 1968. The Evolution of Paleolithic Art. *Scientific American* Vol. 209: 58-74.
- Leroi-Gourhan, A. 1982. *The Dawn of European Art*. Cambridge: Cambridge University Press.
- Leroi-Gourhan, A. 1986. The Religion of the Caves: Magic or Metaphysics? *October* Vol. 37: 6-17.
- Lévi-Strauss. C. 1963 [1958]. *Structural Anthropology*. New York & London: Basic Books.
- Lévi-Strauss. C. 1966 [1962]. *The Savage Mind*. George Weidenfeld and Nicolson Ltd.
- Lévi-Strauss. C. 1969 [1949]. *The Elementary Structures of Kinship*. Beacon Press.
- Lévi-Strauss. C. 1983 [1964]. *The Raw and the Cooked*. University of Chicago Press.
- Lévi-Strauss. C. 1990 [1966] *From Honey to Ashes*. Cape. University of Chicago Press.

- Lévi-Strauss, C. 1990 [1968]. *The Origin of Table Manners*. University of Chicago Press.
- Lévi-Strauss, C. 1990 [1971]. *The Naked Man*. University of Chicago Press.
- Lewis, I. M. 1971. *Ecstasy Religion*. Penguin Books.
- Lewis, I. M. 1984. What is a Shaman? In M. Hoppál (ed.), *Shamanism in Eurasia*, Part 1: 3-12. Göttingen, Germany: Edition Herodot.
- Lewis, M. A. 1995. *Technological Development and Culture Change on St. Lawrence Island: A Functional Typology of Toggle Harpoon Heads*. Ph.D. Dissertation, Department of Anthropology, University of Alaska Fairbanks.
- Lewis-Williams, J. D. 1975. The Drakensberg Rock Paintings as an Expression of Religious Thought. In E. Anati (ed.), *Les Religions de la Préhistoire*, pp. 413-426. Capo di Ponte: Centro Camuno di Studi Preistorici.
- Lewis-Williams, J. D. 1980. Ethnography and Iconography: Aspects of Southern San Thought and Art. *Man* 15: 467-482.
- Lewis-Williams, J. D. 1981. *Believing and Seeing: Symbolic Meanings in Southern San Rock Paintings*. London, New York, Toronto, Sydney, & San Francisco: Academic Press.
- Lewis-Williams, J. D. 2002. *The Mind in the Cave*. Thames & Hudson.
- Lewis-Williams, J. D. 2006. Debating Rock Art: Myth and Ritual, Theories and Facts. *The South African Archaeological Bulletin* Vol. 61(183): 105-114.
- Lewis-Williams, J. D. 2008. Religion and Archaeology: An Analytical, Materialist Account. In K. Hays-Gilpin & D. S. Whitley (ed.), *Belief in the Past*, pp. 23-42. Walnut Creek, California: Left Coast Press.
- Lewis-Williams, J. D. 2011. *Deciphering Ancient Minds: the Mystery of San Bushman Rock Art*. London: Thames & Hudson.
- Lewis-Williams, J. D & Dowson, T. A. 1988. Signs of all Times: Entoptic Phenomena in Upper Paleolithic Art. *Current Anthropology* Vol. 29(2): 201-245.
- Lewis-Williams, J. D & Dowson, T. A. 1993. On Visions and Power in the Neolithic: Evidence from the Decorated Monuments. *Current Anthropology* Vol. 34(1): 55-65.

- Lewis-Williams, D. & Pearce, D. 2004. *San Spirituality: Roots, Expression, and Social Consequences*. Walnut Creek: AltaMira Press.
- Lewis-Williams, D. & Pearce, D. 2005. *Inside the Neolithic Mind*. London: Thames & Hudson.
- Linn, A. J. & Lee, M. 1999. Dolls and Human Figurines in Alaska Native Cultures. In M. Lee (ed.), *Not Just a Pretty Face: Dolls and Human Figurines in Alaska Native Cultures*, pp. 3-48. Fairbanks: University of Alaska Museum.
- Lommel, A. 1966a. *Shamanism: the Beginning of Art*. McGraw-Hill.
- Lommel, A. 1966b. *Prehistoric and Primitive Man*. McGraw-Hill.
- Lommel, A. 1967. *The World of the Hunters*. Evelyn, Adams & Mackay.
- Lowenstein, T. 1992. *The Things That Were Said of Them: Shaman Stories and Oral Histories of the Tikigaq People*. Berkley: University of California Press.
- Ludwig, A. M. 1966. Altered States of Consciousness. *Archive of General Psychiatry* Vol. 15: 225-234. Luna, L. E. & Amaringo, E. 1991. *Ayahuasca Visions : The Religious Iconography of a Peruvian Shaman*. Berkley, California : North Atlantic Books.
- Marcus, J. 2007. Rethinking Ritual. In E. Kyriakidis (ed.), *The Archaeology of Ritual*, pp. 43-76. The Cotsen Institute of Archaeology.
- Marangou, C. 2001. Sacred or Secular Places and the Ambiguous Evidence of Prehistoric Rituals. In P. F. Biehl & F. Bertemes (ed.), *The Archaeology of Cult and Religion*, pp. 139-160. Archaeolingua.
- Mason, O. K. 1998. The Contest Between Ipiutak, Old Bering Sea and Birnirk Polities and the Origin of Whaling during the First Millennium A.D. *Journal of Anthropological Archaeology* Vol. 17(3): 240-325.
- Mason, O. K. 2009a. Art, Power, and Cosmos in Bering Strait Prehistory. In W. W. Fitzhugh, J. Hollowell & A. Crowell (ed.), *Gifts from the Ancestors: Ancient Ivories of Bering Strait*, pp. 112- 125. Princeton University Art Museum.

- Mason, O. K. 2009b. The Multiplication of Forms: Bering Strait Harpoon Heads as a Demic and Macroevolutionary Proxy. In A. M. Prentiss et al. (ed.), *Macroevolution in Human prehistory*, pp. 73-107. Springer.
- Mason, O.K. & Barber, V. 2003. A Paleogeographic Preface to the Origins of Whaling: Cold Is Better. In A.P. McCartney (ed.), *Indigenous Ways to the Present: Native Whaling in the Western Arctic*, pp. 69-108. Edmonton: Circumpolar Institute, University of Alberta & Salt Lake City: University of Utah Press.
- Mason, O.K. & Bower, P. M. 2009. The Origin of Thule is Always Elsewhere: Early Thule within Kotzebue Sound, “Cul-de-Sac” or Nursery? In B. Grønnow (ed.), *On the Track of the Thule Culture from Bering Strait to East Greenland*, pp. 25-44. Copenhagen: National Museum Studies in Archaeology & History Vol. 15.
- Mason, O.K. & Gerlach, S.C. 1995. Chukchi Hot Spots, Paleo-Polynyas, and Caribou Crashes: Climatic and Ecological Dimensions of North Alaska Prehistory. *Arctic Anthropology* Vol. 32(1): 101-130.
- Mathiassen, T. 1927. Archaeology of the Central Eslimo, 2 vols. Report of the Fifth Thule Expedition 1921-24, 4(1-2). Copenhagen.
- McCall, G. S. 2007. Add Shamans and Stir? A Critical Review of the Shamanism Model of Forager Rock Art Production. *Journal of Anthropological Archaeology* 26: 224-233.
- McCauley, R. N. & Lawson, E. T. 2007. Cognition, Religious Ritual, and Archaeology. In E. Kyriakidis (ed.), *The Archaeology of Ritual*, pp. 209-254. The Cotsen Institute of Archaeology.
- McGhee, R. 1976. Differential Artistic Productivity in the Eskimo Cultural Tradition. *Current Anthropology* Vol. 17(2): 203-220.
- McGhee, R. 1977. Ivory for the Sea Women: the Symbolic Attributes of a Prehistoric Technology. *Canadian Journal of Archaeology* No. 1: 141-149.
- McGhee, R. 2009. When and Why Did the Inuit Move to the Eastern Arctic? In H. Maschner, O. Mason & R. McGhee (ed.), *The Northern World AD 900 — 1400*, pp. 155-163. Salt Lake City: The University of Utah Press.



- Metzner, R. (ed.) 1999. *Ayahuasca : Human Consciousness and the Spirits of Nature*. New York : Thunder's Mouth Press.
- Merkur, D. 1985. *Becoming Half Hidden: Shamanism and Initiation among the Inuit*. Almqvist & Wiksell International Stockholm.
- Michael, H. N. 1967. *Lieutenant Zagoskin's Travels in Russian America, 1842-1844*. Toronto: University of Toronto Press.
- Miller, D. 1982. Artefacts as Products of human Categorisation Processes. In I. Hodder, (ed.), *Symbolic and Structural Archaeology*, pp. 17-25. Cambridge University Press.
- Miller, D. 1985. *Artefacts as Categories: A Study of Ceramics Variability in Central India*. Cambridge University Press.
- Mithen, S. 1996. *The Prehistory of the Mind*, Thames and Hudson.
- Mithen, S. 1998. Introduction. In Mithen, S. (ed.), *Creativity in Human Evolution and Prehistory*, pp. 1-16. Routledge.
- Mithen, S. 2000 Mind, Brain and Material Culture: an Archaeological Perspective. In P. Carruthers and A. Chamberlain (ed.), *Evolution and the Human Mind*, pp. 207-217. Cambridge University Press.
- Mithen, S. 2001. Archaeological Theory and Theories of Cognitive Evolution. In I. Hodder (ed.), *Archaeological Theory Today*, pp. 98-121. Polity.
- Mithen, S. 2004. From Ohalo to Catalhoyuk: The Development of Religiosity during the Early Prehistory of Western Asia, 20, 000 – 7000 BCE. In H. Whitehouse & L. H. Martin (ed.), *Theorizing Religions Past: Archaeology, History, and Cognition*, pp. 17-43. AltaMira Press.
- Mithen, S. 2006. *The Singing Neanderthals*. Weidenfeld & Nicolson.
- Moore, J. D. 1982. The Interpretation of Spatial Patterning in Settlement Residues. In I. Hodder (ed.), *Symbolic and Structural Archaeology*, pp. 74-79. Cambridge University Press.
- Moore, J. D. 1997. *Visions of Culture*. Altamira Press.

- Morrison, D. 1991. *The Diomedé Jenness Collections from Bering Strait*. Archaeological Survey of Canada, Mercury Series Paper 144. Hull, Quebec: Canadian Museum of Civilization.
- Morrow, P. & Volkman, T. A. 1975. The Loon with the Ivory Eyes: A Study in Symbolic Archaeology. *The Journal of American Folklore* Vol. 88(348): 143-150.
- Mousalimas, S. A. 2003. *From Mask to Icon: Transformation in the Arctic*. Brookline, Massachusetts: Holy Cross Orthodox Press.
- Murdoch, J. 1892. *Ethnological Results of the Point Barrow Expedition*. Bureau of Ethnology, 9th Annual Report. Washington, D. C.: Government Printing Office.
- Murphy, J. M. 1964. Psychotherapeutic Aspects of Shamanism on St. Lawrence Island, Alaska. In A. Kiev (ed.), *Magic, Faith and Healing*, pp. 53-83. New York : The Free Press.
- Myerhoff, B. 1974. *Peyote Hunt: The Sacred Journey of the Huichol Indians*. Ithaca, New York: Cornell University Press.
- Naranjo, C. 1973. Psychological Aspects of the Yagé Experience in An Experimental Settings. In M. J. Harner (ed.) *Hallucinogens and Shamanism* pp. 176-190. New York: Oxford University Press.
- Nelson, E. W. 1900. *Eskimo about Bering Strait*. Bureau of American Ethnology, 18th Annual Report, pt. 1.
- Nicole, B. 2009. Grasping the Elusive and Unknowable: Material Culture in Ritual Practice. *The Journal of Objects, Art and Belief* Vol. 5: 266-287.
- Nobel, W. & Davidson, I. 1996. *Human Evolution, Language and Mind*. Cambridge: Cambridge University Press.
- Nowak, M. & Durrant, S. 1977. *The Tale of the Nisan Shamaness: A Manchu Folk Epic*. Seattle: University of Washington Press.
- Nowell, A. 2001. The Re-Emergence of Cognitive Archaeology. In A. Nowell (ed.), *In the Mind's Eye*, pp. 20-32. International Monographs in Prehistory.
- O'Brien, M. Lyman. R. L. & Leonard, R. D. 1998. Basic Incompatibilities between Evolutionary and Behavioral Archaeology. *American Antiquity* Vol. 63: 485-498.

- Oswalt, W. H. 1967. *Alaskan Eskimos*. San Francisco: Chandler Publishing Company.
- Patterson, C. 1998. Seeking Power at Willow Creek Cave, *Northern California. Anthropology of Consciousness* 9(1): 38-49.
- Pavlinkaya, L. R. 2001. Cultural Regions in Siberian Shamanism. In J. Pentik-äinen (ed.), *Shamanhood Symbolism and Epic*, pp. 41-48. Budapest: Akadémiai Kiadó.
- Pearson, J. L. 2002. *Shamanism and the Ancient Mind*. Walnut Creek, CA: Rowman Altamira.
- Pedersen, M.A. 2001. Totemism, Animism and North Asian Indigenous Ontologies. *Journal of the Royal Anthropological Institute* Vol. 7(3): 411-427.
- Pedersen, M. A. 2007. Talismans of Thought: Shamanist Ontologies and Extended Cognition in Northern Mongolia. In A. Henare, M. Holbraad & S. Wastell (ed.), *Thinking Through Things: Theorising Artefacts Ethnographically*, pp. 141-166. London: Routledge.
- Pentik-äinen, J. 1998. The Shamans and Shamanism. In J. Pentik-äinen, T. Jaatinen, L. Lehtinen & M. R. Saloniemi (ed.), *Shamans*, pp. 29-50. Tampere Museums.
- Pentik-äinen J. (ed.). 1996. *Shamanism and Northern Ecology*. Berlin and New York: Mouton de Gruyter.
- Pentik-äinen J. 2001. *Shamanhood Symbolism and Epic*. Budapest: Akadémiai Kiadó.
- Pentik-äinen, J., Jaatinen, T., Lehtinen, L. & Saloniemi, M. R. (ed.). 1998. *Shamans*. Tampere Museums.
- Pettit, P. 1975. *The Concept of Structuralism*. Berkeley and Los Angeles: University of California Press.
- Pfeiffer, J. E. 1982. *The Creative Explosion: An Inquiry into the Origins of Art and Religion*. New York: Harper & Row.
- Place, R. M. & Guiley, R. E. 2008. *Shamanism*. New York: Infobase Publishing.
- Preucel, R. W. 2006. *Archaeological Semiotics*. Blackwell.
- Price, N. S (ed.). 2001a. *The Archaeology of Shamanism*. London and New York: Routledge.

- Price, N. 2001b. *An Archaeology of Altered States: Shamanism and Material Culture Studies*. In N. Price (ed.), *The Archaeology of Shamanism*, pp. 3-16. London and New York: Routledge.
- Quinlan, A. 2000. The Ventriloquist's Dummy: A Critical Review of Shamanism and Rock Art in Far Western North America. *Journal of California and Great Basin Anthropology* Vol. 22(1): 92-108.
- Rainey, F. G. 1941a. *Eskimo Prehistory: The Okvik Site on the Punuk Islands*. Anthropological Paper No. 37, part 4. New York: American Museum of Natural History.
- Rainey, F. G. 1941b. The Ipiutak Culture at Point Hope, Alaska. *American Anthropologist* Vol. 43 (3): 364-375.
- Rainey, F. G. 1947. *The Whale Hunters of Tigara*. Anthropological Paper Vol. 41, part 2. New York: American Museum of Natural History.
- Rainey, F. G. 1971. *The Ipiutak Culture: Excavations at Point Hope, Alaska*. Reading, MA: Addison-Wesley Publishing Company.
- Rasmussen, K. 1929. *Intellectual Culture of the Hudson Bay Eskimos*. Report of the Fifth Thule Expedition, 1921-24, Vol. XII(1), edited by H. Ostermann. Copenhagen: Gyldendalske Boghandel, Nordisk Forlag.
- Rasmussen, K. 1952. *The Alaska Eskimos*. Report of the Fifth Thule Expedition, 1921-24, Vol. X(3), edited by H. Ostermann. Copenhagen: Gyldendalske Boghandel, Nordisk Forlag.
- Ray, D. J. 1961. *Artists of the Tundra and the Sea*. Seattle: University of Washington Press.
- Ray, D. J. 1967. *Eskimo Masks: Art and Ceremony*. University of Washington Press.
- Ray, D. J. 1982. Reflections in Ivory. In W. W. Fitzhugh & S. A. Kaplan, *Inua: Spirit World of the Bering Sea Eskimo*, pp. 255-267. Washington: Smithsonian Institution Press.
- Ray, D. J. 1992. *The Eskimos of Bering Strait, 1650-1898*. Seattle & London: University of Washington Press.

- Ray, K. 2000. Material Metaphor, Social Interaction and Historical Reconstructions. In J. Thomas (ed.), *Interpretive Archaeology*, pp. 398-417. London and New York: Leicester University Press.
- Reichel-Dolmatoff, G. 1967. Rock Paintings of the Vaupés: An Essay of Interpretation. *Folklore Americas* 27(2): 107-113.
- Reichel-Dolmatoff, G. 1978. Drug-induced Optical Sensations and Their Relationship to Applied Art Among Some Colombian Indians. In M. Greenhalgh & V. Megaw (ed.), *Art in Society: Studies in Style, Culture and Aesthetics*, pp. 289-304. London: Duckworth.
- Reilly, K. 1989. The Shaman in Transformation Pose: A Study of the Theme of Rulership in Olmec Art. *Record of the Art Museum, Princeton University* Vol. 48(2): 4-21.
- Renfrew, C. 1982. *Towards an Archaeology of Mind*. Cambridge University Press.
- Renfrew, C. 1985. *The Archaeology of Cult*. Athens Suppl. Vol. 18.
- Renfrew C. 1994a. Towards a Cognitive Archaeology. In C. Renfrew & E. B. W. Zubrow (ed.), *The Ancient Mind*, pp. 3-12. Cambridge University Press.
- Renfrew C. 1994b The Archaeology of Religion. In C. Renfrew & E. B. W. Zubrow (ed.), *The Ancient Mind*, pp. 47-54. Cambridge University Press.
- Renfrew, C. & Bahn, P. G. 2000. *Archaeology: Theories, Methods, and Practice*. Thames and Hudson.
- Renfrew, C. & Morley, L. (ed.). 2007. *Image and Imagination*. McDonald Institute of Archaeological Research, University of Cambridge.
- Renfrew, C. & Zubrow, E. B. W. (ed.). 1994. *The Ancient Mind*. Cambridge University Press.
- Reinach, S. 2003[1905]. *Cults, Myths and Religions*. Kessinger Publishing.
- Ripinsky-Naxon, M. 1993. *The Nature of Shamanism*. State University of New York Press.
- Robb, J. E. 1998. The Archaeology of Symbols. *Annual Review of Anthropology* Vol. 27: 329-346.

- Rogers, S. L. 1982. *The Shaman: His Symbols and His Healing Power*. Springfield, Illinois: Charles C Thomas.
- Roseman, M. 1991. *Healing Sounds from the Malaysian Rainforest: Temiar Music and Medicine*. Los Angeles: University of California Press.
- Rouget, G. 1985. *Music and Trance*. The University of Chicago Press.
- Rozwadowski, A. 2001. Sun Gods or Shamans? Interpreting the “Solar-headed” Petroglyphs of Central Asia. In N. S. Price (ed.), *The Archaeology of Shamanism*, pp. 65-86. London & New York: Routledge.
- Rudenko, S. I. 1961. The Ancient Culture of the Bering Sea and the Eskimo Problem. *Anthropology of the North: Translations from Russian Sources*, No. 1. Toronto: University of Toronto Press.
- Sabloff, J. 2005. Processual Archaeology. In C. Renfrew & P. Bahn (ed.), *Archaeology: The Key Concepts*, pp. 159-164. London & New York: Routledge.
- Sales, K. 1992. Ascent to the Sky: A Shamanic Initiatory Engraving from the Burrup Peninsula, Northwestern Australia. *Archaeology in Oceania* Vol. 27(1): 22-35.
- Sandars, N. K. 1968. *Prehistoric Art in Europe*. Baltimore, Maryland: Penguin Books.
- Santos-Granero, F. 1991. *The Power of Love: The Moral Use of Knowledge amongst the Amuesha of Central Peru*. London: The Athlone Press.
- Santos-Granero, F. 2009. *The Occult Life of Things: Native Amazonian Theories of Materiality and Personhood*. Tucson: University of Arizona Press.
- Saussure, F. de. 2011[1916]. *Course in General Linguistics*. New York: Columbia University Press.
- Schaafsma, P. 1989. Supper or Symbol: Roadrunner Tracks in Southwest Art and Ritual. In H. Morphy (ed.), *Animals into Art*, pp. 253-269. London: Unwin Hyman.
- Schechner, R. 1985. *Between Theatre and Anthropology*. Philadelphia: University of Pennsylvania Press.
- Schechner, R. & Appel, W. 1990. *By Means of Performance: Intercultural Studies of Theatre and Ritual*. Cambridge: Cambridge University Press.

- Schele, L. & Freidel D. 1990. *A Forest of Kings: The Untold Story of the Ancient Maya*. New York: Quill William Morrow.
- Schultes, R. E. 1972. An Overview of Hallucinogens in the Western Hemisphere. In P. T. Furst (ed.), *Flesh of the Gods*, pp. 3-54. New York & Washington: Praeger Publishers.
- Sears, W. H. 1961. The Study of Social and Religious System in North American Archaeology. *Current Anthropology* Vol. 2: 223-246.
- Serov, S. I. 1988. Guardians and Spirit-Masters of Siberia. In W. W. Fitzhugh & A. Crowell (ed.), *Crossroads of Continents: Cultures of Siberia and Alaska*, pp. 241-255. Smithsonian Institution.
- Shanks, M. & Tilley, C. 1982. Ideology, Symbolic Power and Ritual Communication: A Reinterpretation of Neolithic Mortuary Practices. In I. Hodder (ed.), *Symbolic and Structural Archaeology*, pp. 129-154. Cambridge University Press.
- Shanks, M. & Tilley, C. 1987. *Reconstructing Archaeology*. Cambridge: Cambridge University Press.
- Shanks, M. & Tilley, C. 1988. *Social Theory and Archaeology*. Albuquerque: University of New Mexico Press.
- Shennan, S. J. 1986. Interaction and Change in Third Millennium B. C. Western and Central Europe. In C. Renfrew & J. F. Cherry (ed.), *Peer Polity Interaction and Socio-Political Change*, pp. 137-148. Cambridge University Press.
- Shi Kun (史昆).1989. Shamanism Practices among the Minorities of South-West China. In M. Hoppál & O. von Sádovszky (ed.), *Shamanism: Past and Present*, Part 2: 241-251. Ethnographic Institute, Hungarian Academy of Sciences.
- Siikala, A-L. 1978. *The Rite Technique of the Siberian Shaman*. Helsinki: Academia Scientiarum Fennica.
- Siikala, A-L. 1992a. Siberian and Inner Asian Shamanism. In A-L. Siikala & M. Hoppál, *Studies on Shamanism*, pp. 1-14. Helsinki: Finnish Anthropological Society & Budapest: Akadémiai Kiadó.

- Siikala, A-L. 1992b. The Siberian Shaman's Technique of Ecstasy. In A-L. Siikala & M. Hoppál, *Studies on Shamanism*, pp. 26-40. Helsinki: Finnish Anthropological Society & Budapest: Akadémiai Kiadó
- Siikala, A-L. and Hoppál, M. (ed.). 1992. *Studies on Shamanism*. Helsinki: Finnish Anthropological Society & Budapest: Akadémiai Kiadó
- Solomon, A. 1997. The Myth of Ritual Origins? Ethnography, Mythology and Interpretation of San Rock Art. *The South African Archaeological Bulletin* Vol. 52(165): 3-13.
- Solomon, A. 1999. Meanings, Models and Minds: A Reply to Lewis-Williams. *The South African Archaeological Bulletin* Vol. 54(169): 51-60.
- Solomon, A. 2001. What is an Explanation? Belief and Cosmology in Interpretations of Southern San Rock Art in Southern Africa. In H-P. Francfort & R. N. Hamayon (ed.), *The Concept of Shamanism: Uses and Abuses*, pp. 161-177. Budapest: Akadémiai Kiadó
- Sonne, B. 1982. The Professional Ecstatic in His Social and Ritual Position. In N. G. Holm (ed.), *Religious Ecstasy*, pp. 146-150. Uppsala & Stockholm: Almqvist and Wiksell Int.
- Spencer, R. F. 1959. *The North Alaskan Eskimo: A Study in Ecology and Society*. Washington D. C.: Smithsonian Institution.
- Stahl, P. W. 1986. Hallucinatory Imagery and the Origin of Early South American Figurine Art. *World Archaeology* Vol. 18(1): 134-150.
- Stanford, D. J. 1976. *Walakpa: It's Place in the Birnirk and Thule Cultures*. Smithsonian Contributions to Anthropology 20. Washington, D. C.: Smithsonian Institution.
- Steadman, S. R. 2009. *The Archaeology of Religion*. Walnut Creek, California: Left Coast Press.
- Stern, P. V. D. 1969. *Prehistoric Europe: From Stone Age Man to the Early Greeks*. New York: W. W. Norton & Company.
- Sturrock, J. 2003. *Structuralism*. Blackwell Publishing.
- Stutley, M. 2003. *Shamanism: An Introduction*. London and New York: Routledge.



- Swancutt, K. 2012. Masked Predation, Hierarchy and the Scaling of Extractive Relations in Inner Asia and Beyond. In M. Brightman, V. E. Crotti & O. Ulturgasheva (ed.), *Animism in Rainforest and Tundra: Personhood, Animals, Plants and Things in Contemporary Amazonia and Siberia*, pp. 175-194. New York & Oxford: Berghahn Books.
- Taqon, P. 1983. An Analysis of Dorset Art in Relation to Prehistoric Culture. *Études Inuit Studies* Vol. 7(1): 41-65.
- TePaske, B. A. 1997. Eliade, Jung, and Shamanism. In D. Sandner and S. H. Wong (ed.), *The Sacred Heritage: The Influence of Shamanism on Analytical Psychology*, pp. 19-28. New York: Routledge.
- Thomas, J. 1996. *Time, Culture and Identity*. London and New York: Routledge.
- Thomas, J. 2004. *Archaeology and Modernity*. Routledge.
- Tilley, C. 1989. Interpreting Material Culture. In I. Hodder (ed.), *The Meaning of Things*, pp. 185-194). London: Unwin Hyman.
- Tilley, C. 1991. *Material Culture and Text: The Art of Ambiguity*. Taylor & Francis.
- Tilley, C. 1993. *Interpretive Archaeology*. Berg Publishers.
- Tilley, C. 1999. *Metaphor and Material Culture*. Oxford: Blackwell.
- Tremlin, T. 2006. *Minds and Gods*. Oxford University Press.
- Trigger, B. C. 1986. Prospects for A World Archaeology. *World Archaeology* Vol. 18(1): 1-20.
- Trigger, B. G. 2006. *A History of Archaeological Thought*. Cambridge University Press.
- Tringham, R. & Conkey, M. 1998. Rethinking Figurines: A Critical View from Archaeology of Gimbutas, the 'Goddess' and Popular Culture. In L. Goodison and C. Morris (ed.) *Ancient Goddesses: The Myths and the Evidences*, pp. 22-45. London: British Museum Press.
- Turner, E. 1994. The Effect of Contact on the Religion of the Inupiat Eskimos. In T. Irimoto & T. Yamada (ed.), *Circumpolar Religion and Ecology*, pp. 143-161. University of Tokyo Press.

- Ucko, P. J. 1962. The Interpretation of Prehistoric Anthropomorphic Figurines. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* Vol. 92: 38-54.
- Ucko, P. J. 1967. *Palaeolithic Cave Art*. McGray-Hill.
- Vanpool, C. S. 2009. The Signs of the Sacred: Identifying Shamans Using Archaeological Evidence. *Journal of Anthropological Archaeology*. Vol. 28: 177-190.
- Vanpool, C. S. & Newsome, E. 2012. The Spirit in the Material: A Case Study of Animism in the American Southwest. *American Antiquity* Vol. 77(2): 243-262.
- Vanpool, C. S. & Vanpool, T. L. 2007. *Signs of the Casas Grandes Shamanism*. Salt Lake City: University of Utah Press.
- VanStone, J. W. 1953. Carved Human Figures from St. Lawrence Island, Alaska. *Anthropological Papers of the University of Alaska* Vol. 2(1): 19-29.
- Veniaminov, I. 1984. *Notes on the Islands of Unalashka Districts*. Translated by L. T. Black & R. H. Geoghegan. Kinston, Ontario: The Limestone Press.
- Vitebsky, P. 1995. *The Shaman: Voyages of the Soul Trance, Ecstasy and Healing from Siberia to the Amazon*. London: Duncan Baird Publishers.
- Viveiros de Castro, E. 1998a. Cosmological Deixis and Amerindian Perspectivism. *Journal of the Royal Anthropological Institute* Vol. 4(3): 469-488.
- Viveiros de Castro, E. 1998b. Cosmological Perspectivism in Amazonia and Elsewhere. General lectures, Department of Social Anthropology, University of Cambridge. <http://www.haujournal.org>.
- Viveiros de Castro, E. 2004. Perspectival Anthropology and the Method of Controlled Equivocation. *Tipiti* Vol. 2(1): 3-22.
- Wallis, R. J. 2002. The Bwili or 'Flying Tricksters' of Malakula: A Critical Discussion of Recent Debates on Rock Art, Ethnography and Shamanisms. *Royal Anthropological Institute* 8: 735-760.
- Wallis, R. J. 2009. Re-enchanted Rock Art Landscapes: Animic Ontologies, Nonhuman Agency and Rhizomic Personhood. *The Journal of Archaeology, Consciousness and Culture* Vol. 2(1): 47-70.

- Wallis, R. J. 2013. Exorcising 'Spirits': Approaching 'Shamans' and Rock Art Animically. In G. Harvey (ed.), *Animism*, Leiden & Boston: Brill Academic Publishers.
- Walraven, B. 1985. *Muga: The Songs of Korean Shamanism*. Dordrecht: ICG Printing.
- Walsh, R.N. 1990. *The Spirit of Shamanism*. Los Angeles: Jeremy P. Tarcher.
- Walsh, R. 2007. *The World of Shamanism*. Woodbury, MI: Llewellyn Publications.
- Walter, M. N. 2004. Introduction. In M. N. Walter & E. J. N. Fridman (ed.), *Shamanism: An Encyclopedia of World Beliefs, Practices, and Culture*, Vol. 1: XV-XXVIII. Santa Barbara, Denver & Oxford: ABC-CLIO.
- Wardwell, A. 1986. *Ancient Eskimo Ivories of the Bering Strait*. New York: Hudson Hills Press.
- Washburn, D. K. (ed.). 1983a. *Structure and Cognition in Art*. Cambridge: Cambridge University Press.
- Washburn, D. K. 1983b. Symmetry Analysis of Ceramic Design: Two Tests of the Method on Neolithic Material from Greece and the Aegean. In D. K. Washburn (ed.), *Structure and Cognition in Art*, pp. 138-164. Cambridge: Cambridge University Press.
- Wasson, R. G. 1980. *The Wondrous Mushroom*. New York: McGraw-Hill.
- Watson, A. 2001. The Sound of Transformation: Acoustics, Monuments and Ritual in the British Neolithic. In N. S. Price (ed.), *The Archaeology of Shamanism*, pp. 178-192. London & New York: Routledge.
- Webb, H. S. 2003. *Exploring Shamanism*. Career Press.
- Weyer, E. M. 1932. *The Eskimo: Their Environment and Folkways*. New Haven: Yale University Press.
- White, R. 1982. Rethinking the Middle/Upper Paleolithic Transition. *Current Anthropology* Vol. 23: 169-192.
- Whitehouse, H. 2000. *Argument and Icons: Divergent Modes of Religion*. Oxford University Press.
- Whitehouse, H. 2002. Religious Reflexivity and Transmissive Frequency. *Social Anthropology* 10: 91-103.

- Whitehouse, H. 2004. *Modes of Religiosity*. Walnut Creek, CA: Altamira Press.
- Whitehouse, H. & L. H. Martin (ed.). 2004. *Theorizing Religions Past: Archaeology, History, and Cognition*. AltaMira Press.
- Whitehouse, H. & R. N. McCauley (ed.). 2005. *Mind and Religion*. Walnut Creek, CA: Altamira Press.
- Whitley, D. S. 1992. *Shamanism and Rock Art in Far Western North America*. Cambridge Archaeological Journal 2: 89-113.
- Whitley, D. S. 1994. Shamanism, Natural Modeling and the rock Art of Far Western North America. In S. Turpin (ed.), *Shamanism and Rock Art in North America*, pp. 1-43. San Antonio, TX: Rock Art Foundation, Inc.
- Whitley, D. S. 1998. New Approaches to Old Problems: Archaeology in Search of an Ever Elusive Past. In Whitley, D. S (ed.), *Readers in Archaeological Theory*, pp. 1-28. London: Routledge.
- Whitley, D. S. 2000. *The Art of the Shaman: Rock Art of California*. Salt Lake City: University of Utah Press.
- Whitley, D. S. 2008. Cognition, Emotion, and Belief: First Steps in an Archaeology of Religion. In K. Hays-Gilpin & D. S. Whitley (ed.), *Belief in the Past*, pp. 85-103. Walnut Creek, California: Left Coast Press.
- Whitley, D. S. & Hays-Gilpin, K. (ed.). 2008. *Belief in the Past*. Walnut Creek, CA: Left Coast Press.
- Wilbert, J. 1972. Tobacco and Shamanistic Ecstasy Among the Warao Indians of Venezuela. In P. T. Furst (ed.), *Flesh of the Gods*, pp. 55-83. New York & Washington: Praeger Publishers.
- Willerslev, R. 2004. Not Animal, Not Not-Animal: Hunting, Imitation and Empathetic Knowledge among the Siberian Yukaghirs. *Journal of the Royal Anthropological Institute* Vol. 10(3): 629-652.
- Winkelman, M. 1997. Altered States of Consciousness and Religious Behavior. In S. Glazier (ed.) *Anthropology of Religion: A Handbook of Method and Theory* pp. 393-428. Greenwood Press.

- Winkelman, M. 2000. *Shamanism: the Neural Ecology of Consciousness and Healing*. Greenwood Publishing Group.
- Wylie, A. 2002. *Thinking from Things*. Berkley, Los Angeles and London: University of California Press.
- Wynn, T. 1979. The Intelligence of Later Archeulian Hominids. *Man* 14: 371-391.
- Wynn, T. 1981. The Intelligence of Oldowan Hominids. *Journal of Human Evolution* 10: 529-541.
- Wynn, T. 1991. Tools, Grammar and the Archaeology of Cognition. *Cambridge Archaeological Journal* 1: 191-206.
- Xu Mengxin (徐梦莘). 2008. *Sanchao beimeng huibian*. Shanghai: Shanghai Guji Press.
- Yates, T. 1989. Habitus and Social Space: Some Suggestions about Meaning in the Saami (Lapp) Tent ca. 1700-1900. In I. Hodder (ed.), *The Meanings of Things*, pp. 249-262. London: Unwin Hyman.
- Znamenski, A. 2003. *Shamanism in Siberia: Russian Records of Indigenous Spirituality*. Dordrecht, Boston & London: Kluwer Academic Publisher.
- Znamenski, A. A. 2007. *The Beauty of the Primitive*. Oxford University Press.
- Zhao, Zhongzhi (赵忠志). 2001. *Shaman de shijie: Nishan shaman lun* (The World of the Shaman: on Nisan Shamaness). Liaoning Minzu Chubanshe.
- Zhushchikhovskaya, I. & Danilova, O. 2008. Spiral Patterns on the Neolithic Pottery of East Asia and the Far East. *Documenta Praehistorica* XXXV: 215-226.
- Žornickaja, M. JA. 1978. Dances of Yakut Shamans. In V. Di ószegi & M. Hopp á (ed.), *Shamanism in Siberia*, pp. 299-307. Budapest: Akad émiai Kiadó.